# Twin-PVR Cable Receiver UFC 861si with hard disk and Ethernet







# **FOREWORD**

Dear customer,

this Operating Manual is intended to help you make the fullest use of the extensive range of functions offered by your new cable receiver.

We have tried to make the operating instructions as easy as possible to understand, and to keep them as concise as possible. To help you understand particular specialist terms that cannot be translated, we have added a short glossary at the end of the manual.

The power switch is an environmentally friendly feature. If you will not be using your receiver for an extended period, you should use the power switch to disconnect it from the power supply and save energy. For shorter breaks, you can use the remote control to switch the receiver to standby, which uses only a minimal amount of energy.

We wish you good reception and much pleasure using your new PVR-Cable receiver.

Your KATHREIN team

# **CONTENTS**

FOREWORD	2
CONTENTS	3
IMPORTANT INFORMATION	4
SAFETY INSTRUCTIONS - IMPORTANT INFORMATION	5
RECEIVER FEATURES/SCOPE OF SUPPLY	6
CONTROLS, DISPLAYS AND CONNECTIONS	7
CONNECTION AND SETUP	8
REMOTE CONTROL	. 11
FIRST INSTALLATION	13
MENU TREE	18
OPERATING INSTRUCTIONS	19
ON-SCREEN DISPLAYS (OSD)	21
COMMON INTERFACE	24
SETTING SYSTEM PARAMETERS	27
USER SETTINGS	40
VIDEOTEXT (TELETEXT)	47
EDIT CHANNEL LISTS	48
TWIN FUNCTIONS	54
TIME-SHIFT	56
ELECTRONIC PROGRAMME GUIDE (EPG)	57
AUDIO SETTINGS	68
RECORD	70
RECORDING LIST	74
MULTIMEDIA/GAMES	90
INSTALLATION MENU 1	100
CONNECTING UP THE VIDEO/PVR 1	105
SOFTWARE AND PROGRAMME LIST UPDATE 1	106
OPERATING FROM THE FRONT PANEL	110
TECHNICAL APPENDIX	111
SHORT TECHNICAL GUIDE 1	121
TROUBLESHOOTING/SERVICE 1	123
SUBJECT INDEX 1	124

### IMPORTANT INFORMATION

The channels available on the cable network are subject to continual change. When such changes occur it is necessary to reset the channels. The information for these settings can be found on the Internet or in relevant magazines.

Your receiver is factory fitted with the latest software version. We are however constantly working on adapting the software to the wishes of our customers and to developments in technology. The "Software and Channel List Update" section contains additional information.

To connect the PC/laptop and receiver to the network and use the functions of the PVR Manager, you must have unrestricted rights (administrator rights) for your PC/laptop and on your network.

Please keep the original packaging in case you need to return the product at any time!

The hard disks are fragile due to their construction and are only adequately protected in the receiver by the original packaging.

If receiver is not shipped correctly the warranty on the hard disk will be voided.

Any modifications to the receiver software, or the use of applications not provided by Kathrein, will invalidate the warranty!

You will have to bear the costs yourself for dispatching and repairing any receiver that requires attention due to modifications to the software and use of applications other than those provided by Kathrein!

Therefore exclusively use only software and applications provided by Kathrein for your receiver. These are available by downloading from the satellite or from our Internet pages (www.kathrein.de).

Make a note of the receiver's basic settings, so as to be able to restore them if necessary!

Make sure that the fan at the rear of the unit and the ventilation slots on the unit are not blocked or covered in any way. Otherwise the unit may overheat. There is a risk of fire!

Included in the software for this receiver is software that is licensed under the GNU (General Public Licence). The source code of the program is obtainable under: http://www.kathrein.de/linux/receiver/ufc861/

# INFORMATION ON AUDIO MPEG INC. AND S.I.SV.EL, S.P.A:

This unit makes use of legally protected technologies, which are protected by patents in the USA and also by other intellectual property rights in other countries.

KATHREIN-Werke KG has obtained licences from Audio MPEG Inc. and Societa' Italiana per lo sviluppo dell'elettronica, S.I.SV.EL, S.P.A to use these technologies. These licences carry certain restrictions, which apply also to you as the customer.

Accordingly this unit may be used by the end customer only for private non-commercial purposes and for the licensed content. It may not be used for commercial purposes. The use of products or processes that are sold or used with this unit is not included in this. The use of reverse engineering is not permitted in respect of the licensed technologies, nor is disassembly.

# **SAFETY INSTRUCTIONS - IMPORTANT INFORMATION**



# Safety Instructions - Important Information

This page contains important information about the operation, installation location and connection of the unit. Read these instructions carefully before starting to use the unit.



### Mains cable

Make sure that the mains cable (power supply cable) is not damaged. Units with a damaged mains cable must be disconnected from the mains (disconnect mains connector) and repaired by a qualified engineer before setup. Only use the power pack supplied (if available)!

Risk of death due to electric shock!

### Cleaning

Disconnect the mains connector before cleaning the unit. Only use a dry cloth for cleaning and only clean the outer surface. Never open the unit.

Touching the parts inside the unit carries a risk of death due to electric shock!

### Playing children

Make sure that children do not push any objects into the ventilation slots.

Risk of death due to electric shock!



### Earth connection

The antenna system must be earthed as specified or equipotentially bonded. EN 60728/11 and any national regulations must be complied with.

Danger due to surge voltages, lightning strikes!

### Mains voltage

Only operate the unit with the specified mains voltage (marked on the rear of the-unit or on the external power pack)! The unit may only be connected to the mains and turned on once it has been connected to the antenna and to the TV set or the cable network and PC.

If the mains voltage is too high, there is a risk of fire!

### Repairs

Ensure that any repairs to your unit are carried out by qualified personnel. Opening the unit and attempting to repair it yourself voids all warranty claims!

Improper work on the unit can jeopardise the electrical safety of the unit.

The manufacturer accepts no liability for accidents caused by the user opening the unit!



### Connections

Incorrect wiring of the connections can lead to malfunctions or defects on the unit!

### Long periods of absence/storms/accessibility of the mains connector

Always turn off the unit at the mains switch if you will be absent for a long time or there is a storm. Disconnect it from the mains by unplugging the mains connector. This also applies to the other equipment connected to the unit. Isolation from the cable network is also recommended. Note any timer programs (receiver) and turn the unit on again promptly before the recording time. Ensure the mains connector is accessible at all times.



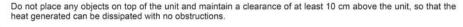
### Installation location

All electronic equipment generates heat. However, the heating of this unit lies within the permissible range. Sensitive furniture surfaces and veneers may become discoloured by the effects of constant heat over time. The feet of the unit can also cause colour changes to treated furniture surfaces. If necessary, place the unit on a suitable stable and flat base!



### Ventilation

The heat generated in this unit is adequately dissipated. However, the unit should never be installed in a cupboard or on shelves with inadequate ventilation. Never cover the cooling slots on the unit (e.g. with other equipment, magazines, tablecloths or curtains)!





### Moisture, sunlight, heat, naked flames

Protect the unit against moisture, dripping and splashed water (do not place any filled objects such as vases on top of the unit). Do not place the unit close to a heater or expose it to direct sunlight and do not operate it in damp locations. Only use the unit in a moderate climate, not in tropical conditions! Do not expose the unit to any naked flame, such as from a candle! This constitutes a fire hazard!

# RECEIVER FEATURES/SCOPE OF SUPPLY

The multi-functional cable receiver UFC 861 receiver is equipped with two independent reception and signal processing systems as well as a computer hard disk with a capacity of 160 GByte, allowing one to download over 100 hours of TV and radio programmes, and to view these as often as wanted without any loss in quality, either at the same time or time-delayed (timeshift function).

The Conax decoding system is embedded in the integrated card reader. In addition, a Common Interface for one CA module allows reception of further pay-TV programmes. The receiver's 16-digit alphanumeric display shows the channel names, while 16 status icons inform you on the current receiver state (e.g. Dolby Digital, timer, ...)

The receiver is fitted with an optical audio output so that the Dolby Digital data stream AC 3 can be transmitted to a Dolby Digital stereo system.

The distinctiveness of this multi-talent arises from the receiver's wide range of features, such as timeshift, PIP (picture-in-picture display), transmission of the MPEG data stream to a PC, transfer, playback and saving of MP3 files. The JPEG viewer allows you to save your pictures to the hard disk and create a slide show.

Ethernet connection: Playback of MP3 and JPEG files as well as of recordings, VLC streaming, software updates and channel list editing via PC/laptop.

The "File Sharing" feature is enabled using the programme "MFServer", which is integrated in the PVR Manager. The programme can be downloaded free of charge from the Kathrein website.

The multi-function control on the front panel allows complete on-unit control.

The receiver's operational system is LINUX based and offers additional convenient functions.

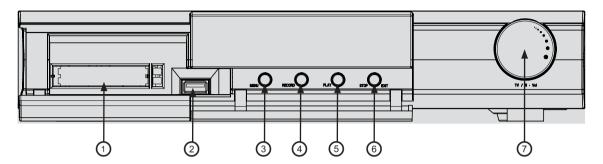
### PRODUCT PACKAGE

- UFC 861si
- Remote control RC 660
- Scart cable
- HF/RF loop-through cable for loop-through operation
- 2 Batteries AAA 1.5 V
- Power supply cable
- Operating manual

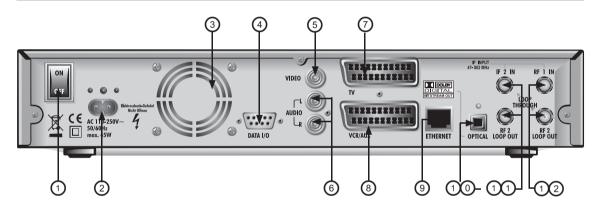
# CONTROLS, DISPLAYS AND CONNECTIONS

This section provides a brief description of all the controls, displays and connections. The button symbols presented here can also be found in the description of the operating steps.

# **VIEW OF FRONT PANEL (FLAP FOLDED DOWN)**



# **VIEW OF REAR PANEL**



### Front panel controls and displays

- Common Interface for two CA modules for Pay-TV cards \*)
- 2. USB 1.0 port
- Menu button to call up or exit menus or submenus
- 4. Record button to start recording manually
- 5. Play button to start playback manually
- Stop/Exit button to stop playback/recording manually or exit the menu
- 7. Multi-function control

# Rear panel controls and displays

- 1. On/Off switch (with mains disconnect)
- 2. Mains power cable
- 3. Fan
- 4. Data interface (only for service)
- 5. Video output (composite colour)
- 6. Audio outputs (L/R) cinch sockets
- 7. Scart socket for TV connection
- 8. Scart socket for VCR/AUX connection
- 9. Network connection (Ethernet)
- Optical data stream output (SPDIF/ Sony Philips Digital Interface Format) for Dolby Digital AC 3 audio
- 11. LNB 2 input and loop-through output
- 12. LNB 1 input and loop-through output

<sup>\*)</sup> The CA module and Pay TV cards are not included

# **CONNECTION AND SETUP**

The following section is intended specifically for specialist dealers. You need not refer to this section unless you are carrying out the installation yourself.

The "Connection Examples" section provides a sample configuration.

Do not connect the receiver to the power supply until all installation work has been properly carried out. Refer to the information in the "Safety Instructions" section.

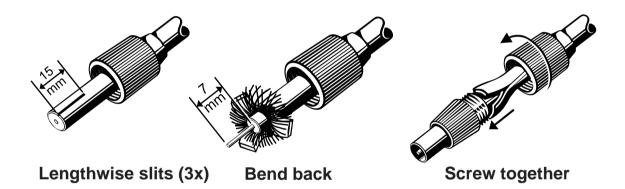
# **CONNECTING THE UNIT (SAT-IF CONNECTIONS)**

# **RF(HF) CONNECTION**

Connect the RF 1 input of the receiver to the antenna socket.

Use a coaxial cable with a standard IEC connector.

If the IEC connector is not yet fitted to the cable, strip the insulation from the cable as shown in the following illustration and carefully fit the connector on to the end of the cable so that it is securely fitted.





When fitting the connector, make sure that no strands from the braiding touch the inner conductor, otherwise a short circuit will occur.

The quality of the reception signal depends on this connection!

# **CONNECTION AND SETUP**

# INFORMATION ABOUT ANTENNA CONNECTION AND "LOOP THROUGH" OPERATION

To enable you to utilise all the reception and recording properties of your UFC 861 twin-PVR cable receiver, such as

- 1. recording one programme and at the same time viewing any other programme or zapping through the channels, and
- 2. recording two different programmes at the same time,

the two tuner inputs of the receiver must each be supplied with the cable signal. Use the loop-through cable supplied to connect the output of tuner 1 to the input of tuner 2.

If only tuner 1 is connected, with no connection to tuner 2, you have only the capabilities of a normal "single receiver" available.

Loop-through cable



### TV AND VIDEO RECORDER CONNECTION

Connect the satellite receiver (TV Scart socket) and the TV set using a Scart cable (see "Connection Example"). If your TV has a stereo feature, you can receive the sound in stereo via the Scart connection. Also connect the satellite receiver (VCR/AUX Scart socket) and the video recorder/DVR using a Scart cable. For system reasons, the same video signals are to be found on the Scart outputs and on the video cinch output.



If you are recording using an external video recorder, remember not to operate the receiver during recording, otherwise all the on-screen displays will appear on your recording.

### **AUDIO CONNECTION**

If you wish to play the sound on your hi-fi system, connect the audio cinch sockets to the input sockets on the hi-fi system with an appropriate cable (see "Connection Example").

# OPTICAL DIGITAL OUTPUT

The fibre-optic output is intended for the connection of a Dolby Digital system (see "Connection Example").

# **CONNECTION AND SETUP**

### INSERTING BATTERIES IN THE REMOTE CONTROL



Remove the cover on the rear of the remote control.

Insert the two supplied batteries into the remote control. Ensure correct polarity of the batteries; the + and - markings are indicated inside the battery compartment.

Slide the cover back into the housing until it locks in place.

### Used batteries are special waste!

Do not throw spent batteries into your domestic waste; take them to a collection point for old batteries!

### DISPOSAL INSTRUCTIONS



Electronic equipment is not domestic waste - in accordance with directive 2002/96/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL dated 27th January 2003 on used electrical and electronic appliances, it must be disposed of properly.

At the end of its service life, take this unit for disposal to an appropriate official collection point.

# **REMOTE CONTROL**



0 ... 9 Number input for channels, timers etc.

Access main menu Exit menus

(red)
Access Favourites

(green)
Picture-in-picture
from 2<sup>nd</sup> tuner or
hard disk

010

Volume

Exit menu -

back to TV picture



Fast rewind

Playback

Hard disk contents

Pause (freezeframe)

Time-shift

(red)
One-touch
recording



(b)
Power/standby

Videotext (Teletext)

(yellow)
Access channel options Sound/subtitles selection

(blue)
Switch between
TV/radio

Access channel information Programme info

① AV mode

Channel selection up/down

Confirm input Access channel list

Cursor buttons

Access TVTVEPG (Electronic Programme Guide)

Fast forward
Display recordings

Stop recording/ playback

# REMOTE CONTROL

### **REMOTE CONTROL RC 660**

The RC 660 remote control supports up to four devices which are supplied with the RC 660 as standard.

First, switch off all other receivers (mains switch).

### 1. Setting via menu (as of software version 1.01)

For the UFS 822, the remote control code does not have to be entered manually. You can easily select one of the four existing remote control codes in the menu (see menu "System setup", "STB management", "Remote control code").

**Notice:** As of software version 1.01, the remote control code can only be modified through the menu. Manual modifications will not be saved by the receiver.

### 2. Manual setting (only possible if the software version is older than 1.01)

Switch on the relevant receiver.

On the remote control simultaneously press

Address  $1 = \begin{bmatrix} EXIT \end{bmatrix} + \begin{bmatrix} 9 \end{bmatrix} + \begin{bmatrix} 1 \end{bmatrix}$ 

Then switch the receiver off again at the power switch and do the same for the other units ([xx]] + (9) + (2) for the second receiver; [xx]] + (9) + (3) for the third receiver and

+9+4 for the fourth receiver)

Make sure only one receiver is on at a time!

To switch the remote control to an infrared code:

When you have confi gured all receivers to their infrared code, to switch between units on the remote control do the following:

For operating the first receiver (address 1), press

EXIT + 1, for the second receiver EXIT + 2, for the third receiver EXIT + 3 and

for the fourth receiver EXT + 4

 $\mathbb{E}^{\mathbb{N}}$  +  $\mathbb{O}$  (red) = Kathrein UFD 5xx code for remote control RC 400

The RC 600 and RC 650 remote controls cannot be replaced!

Before using your unit for the first time, read the "Safety Instructions" and "Connection and Setup" sections.



The "Connection Examples" section provides a sample configuration.

Do not connect the receiver to the power supply until all installation work has been properly carried out.

The guidance given in the "First Installation" section assumes that the receiver has been properly connected as per the "Safety Instructions" and "Connection and Set-Up" sections.

First switch your TV set on and select the AV channel position. Switch on your receiver at the power switch on the rear of the unit. The following display appears:



Also pay attention to the bars at the bottom of the on-screen display! These provide information on what to do next.



Select the menu language you want using the buttons. Available options: German, English, Turkish, Italian, Spanish, Polish, Dutch and French.

Press the (green) button to move to the next menu.

The following display appears:



Use the ATA buttons here to select the settings for your TV set.

### Refer to the operating instructions for your television set!

### **Video Output**

Here select the type of video signal at the Scart socket or HDMI socket. Select the signal that your TV set can process.

- FBAS Composite baseband signal (colour/picture/blanking/synchronous signal)
- RGB Red/Green/Blue signal
- YUV Component signal
- Y/C S-Video signal (luminance/chrominance) or

### TV aspect ratio

Here select the TV picture format. Either

- 4:3 or
- 16:9

### **Display Format**

Select the screen display mode here:

- for TV type "4:3": "Pan & Scan" or "Letter-Box"
- for TV type "16:9": "Automatic" or "Always 16:9"

### Rear fan

Here you can select whether the rear fan always runs whilst the unit is switched on "On" or whether the fan will be switched on and off again at pre-programmed intervals "Scheduled".



Perform the settings by pressing the buttons.

### **Channel Search**

Use the buttons to select whether you:

- All: Free and encrypted channels
- Only FTA channels: Only non-encrypted channels, such as ZDF in Germany
- Only encrypted channels: Only encrypted channels, such as ARENA should be searched for.



Encrypted channels can be decoded only by using a CA module and corresponding smart card. CA modules and smart cards are not supplied with this product. Please contact your respective Pay-TV supplier.

Press the (green) button to start the channel search. If the search is successful, you see the following message (example):



Press the ok button to confirm loading the newly found channels and move on to the next step in First Installation.

Here press the buttons to select the time mode:

- · Manual or
- Auto (receiver takes time from preset channel)

# "Manual" time setting



Use the ATA buttons to make the settings.

### **Set Local Time**

Press the OK button to set the variance from UMTC (Universal Mean Time Coordinate; formerly Greenwich Mean Time) and Winter/Summer time. At the bottom of the screen you see a listing of major cities to provide an indication of which time zone you have just set. Example: For Berlin (Germany) you need to enter +1 hour. Use the

buttons to make the setting.

# "Auto" time setting



Use the ATA buttons to make the settings.

### **Set Local Time**

Press the ok button to set the variance from UMTC (Universal Mean Time Coordinate; formerly Greenwich Mean Time) and Winter/Summer time. At the bottom of the screen you see a listing of major cities to provide an indication of which time zone you have just set. Example: For Berlin (Germany) you need to enter +1 hour. Use the

buttons to make the setting.

### Day

Select today's date here. Press the ok button to display a calendar. Select the day using the cursor

buttons (AVA). If the right month and year are not displayed, you can select as follows:

- Previous month ( (red) button)
- Next month ( (green) button)
- Previous year ( (yellow) button)
- Next year ( blue button)

Press the OK button to confirm your selection.

### **Current Time**

Use the numeric pad to key in the current time here. The position at which the number needs to be entered is automatically underlined.

### **Time Setup Channel**

If the time mode is set to automatic, enter the channel here (pre-setting: "Das Erste"), from which the receiver should receive the time. Press

the OK button to call up a channel list from which you can select the channel you want using the

### **Setup Time Now**

Press the OK button to set the time immediately. It may take a few seconds for the right time and date to be displayed.

If the time on the receiver varies by more than a minute, the time on the receiver will automatically be updated on selecting "Das Erste" channel.

Press the buttons to select "OK" and press the button to complete the First Installation. Then press the button to view the TV picture.

# **MENU TREE**

		Mair	Main Menu	5		
	(Call	Call up by pressing the Med button)	ssing th	e Menu butto	on)	
Edit channel lists	Programme Guide (EPG)	System parameters	Installation	User settings	Recor- ding list	Multimedia/ Games
TV channel list		TV settings	First Installation	Language settings		MP3 Player
Radio channel list		Time setting	Automatic Search	Sleep Timer		Photo Album
TV Favourites Lists		Common Interface	Manual Search	Access control		Games
Radio Favourites List		Receiver Management	Advanced Channel Search	Display settings		Applications
		Hard Disk Management	Update operating software	PVR settings		VLC Streaming
		USB Devices		EPG settings		External Recordings
		Ethernet settings		Dynamic SI Handling		

# **OPERATING INSTRUCTIONS**

### MENU CONCEPT

The structure of the menu concept is based on logical operating sequences. The programme showing on the current selected channel always appears in the top right-hand corner of the screen.

You will find detailed descriptions of the selected menu items in the relevant sections of the operating manual!

Note:

The selected menus, sub-menus and positions, as well as the parameters to be set, are each highlighted in colour. The menus are self-explanatory.



Also note the bars at the bottom of the on-screen display! These provide information on what to do next.



Press the button to call up the main menu and press the T buttons to call up the sub-menus.

Press the OK button to access the sub-menus. Press the AV buttons to select items within the sub-menus.

The settings under the various options are made either by pressing the buttons or using the numeric pad. You can exit the main menu and sub-menus, and the various options, step-by-step by

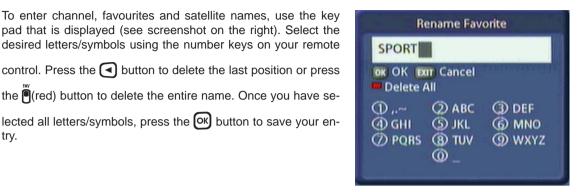
pressing the button (the settings/changes you made are saved). Press the button to return directly from one of the menus to the TV picture (the settings/changes you made are saved).

# **OPERATING INSTRUCTIONS**

### ALPHANUMERIC INPUTS

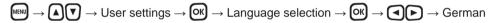
To enter channel, favourites and satellite names, use the key pad that is displayed (see screenshot on the right). Select the desired letters/symbols using the number keys on your remote

the \( \big| \) (red) button to delete the entire name. Once you have selected all letters/symbols, press the or button to save your entry.



### LANGUAGE SELECTION - OSD

The language for the on-screen display is set as follows:



The languages available are German, English, Italian, French, Dutch, Polish, Spanish and Turkish.

You can now make the other settings:

- Subtitles language
- Audio language
- SI (Event) language

Settings are performed in the same way as the OSD language.

When you have made all the settings, press the will button to exit the menu and save your settings. Press the EXIT button to return directly to the TV picture.

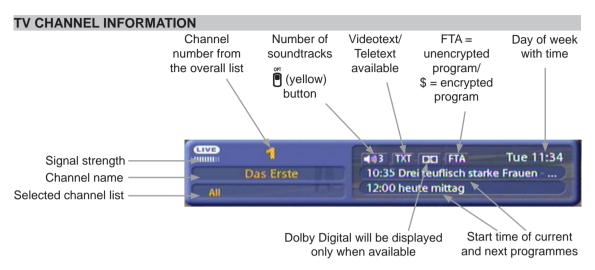
### SYMBOL CODES FOR THE RECEIVER DISPLAY

Various symbols are occasionally shown in the receiver display above the normal display (channel name). These are not shown permanently, they are shown only for specific functions, procedures or channel features.

USB port for the application Radio operation Pause Transmission is broadcast in HD Mute Recording in progress Hard disk in receiver active Playback **Encrypted broadcast** Transmission is broadcast in Dolby Digital MP3 playback > Rewind/Wind on

# **ON-SCREEN DISPLAYS (OSD)**

### CHANNEL INFORMATION



The channel information is displayed for a few seconds (configurable on the "User Preference" menu under "Appearance settings") every time you change channel, or can be displayed permanently by pressing the **1** button.

### RADIO CHANNEL INFORMATION

The message for the set radio channel has the same layout. If a radio channel supports "Radiotext plus", you will see the display "RT+" alongside the channel identification. The available radio text is shown in the UFC 861 display.

### PROGRAM INFORMATION

Press the i button twice to view information on the current program, if transmitted by the program provider.

Use the I buttons to scroll through the pages.

### OPTIONAL CHANNELS

Some channels offer you the facility to select special optional channels (e.g. for football or Formula 1 broadcasts). Press the (yellow) button once to view further soundtrack selection options, if these are transmitted by the channel provider. Use the vote buttons to scroll through the available channels and press the vote button to select them. Pressing the (yellow) button a second time returns you to the normal options menu. Pressing the (yellow) button again, or pressing the vote button exits the display again.

# **ON-SCREEN DISPLAYS (OSD)**

### **ERROR MESSAGE**



"No signal" indicates an error in the reception system or in the receiver settings, or a cable network fault.

Check the RF connection at the receiver and at the antenna socket. If you have changed the receiver settings, compare them against the basic settings (provided you made a note of them as suggested).

### TV/RADIO CHANNEL LIST



Press the OK button to access the channel list.

At the top left a TV set or radio icon indicates whether the list is a TV channel list or a radio channel list.

Press the (blue) button to switch between the TV and radio channel lists.

To the right of it you see the current channel list sort order as selected by you.

The channel list can display channels according to various selection and sort criteria, combined variably (see also the example screenshot at the bottom of the next page).

### Selection options:

- Press the (red) button to switch between your own Favourites lists and the list containing all the channels

# **ON-SCREEN DISPLAYS (OSD)**

**Sort options** (accessed by pressing the (yellow) button):

- Press the (red) button to access the alphabetical listing. It shows all the channels sorted alphabetically, or the ones beginning with the selected initial letter.
- Press the (green) button to sort the channels by provider, or to view the channels from a specific provider.
- Press the (blue) button to sort the channels either by channel number, A-Z, Z-A, or by FTA and encoded (CI) channels.

Use the cursor buttons (AVI) to select from the menus, and confirm your selection by pressing the OK button.

Press the i button to view the following items of information on a channel (see example screenshot):



- Frequency (MHz)
- Audio and video PID (Packet Identification Number, used to assign the data for a channel
- ID (Identification Number)
   Identification number of the channel on the transponder

The following screenshot is an example of how selection and sort criteria can be combined in the channel list (selection: TV channels, sorting: channel names beginning with "B"):



# **COMMON INTERFACE**

### IMPORTANT INFORMATION

Always follow the operating instructions from your Pay-TV provider and the instructions supplied with the Smartcard and the CA module!

Smartcards and CA modules are not included with this product!



The cards and modules are issued by the respective Pay TV providers, and contain the subscriber data and details of the channels for which the subscriber has paid. These channels are always encrypted.

Contact the Pay TV provider if you are interested in subscribing to a particular Pay TV channel.

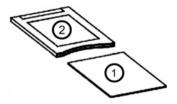
You are responsible for the use of the Smartcard in the CA!

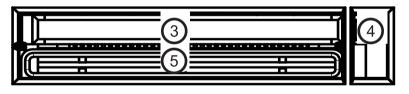
The Smartcard sold by the Pay TV provider, specific to a particular encryption technology, is inserted into the CA module.

Store your card and PIN code securely when not in use!

# INSERTING THE SMARTCARD AND THE CA MODULE

### INSERTING THE CA MODULE INTO THE CI





The Common Interface (CI) 3 of the UFC 861 is suitable for insertion of a CA (Conditional Access) module and is located at the bottom left of the front panel of the receiver (behind the flap). The CA module 2 draws in the Smartcard (1) (chip contacts pointing downwards and towards socket strip) which it then inserts into

the CI slot 3. The Smartcard should be inserted into the CA module without exerting excessive force. This also applies to inserting the CA module into the CI slot.

Do not use a lot of force and follow the instructions supplied with the Smartcard and the CA module.

To remove the CA module, press the relevant eject button 4. When you insert the CA module, the following message appears:



### INSERTING THE SMARTCARD INTO THE SMARTCARD READER (CONAX EMBEDDED)

The integrated Smartcard reader 5 to take "CONAX" coded Smartcards is located under the CI slot. The Smartcard is inserted into the Smartcard reader (Conax embedded) in exactly the same way as into the CA module, except that in this case the chip contacts point downwards.

# **COMMON INTERFACE**

The identity of the Conditional Access module in the CI slot of the UFC 861 and the identity of the Smartcard in the CA module and/or in the Smartcard reader can be found under "System Parameters"

in the "Main Menu", and confirmed by pressing the OK button in the "Common Interface" menu.

The screenshots below depend on the specific module and card, and so are only intended as examples.



Pressing the OK button takes you to the menu generated by the CA module:



From this menu, your card and your PIN code allow you to access various channels from your Pay-TV provider.

"CryptoWorks" has been selected as an example here. The details can be different for each CA module. Always follow the instructions supplied by your Pay-TV provider!

**Note:** The module displays may be shown in English, even if you have selected German as the menu language, because the menu is generated directly by the module!

# **COMMON INTERFACE**

### MULTIPLE DECODING

If your CA module and/or your Smartcard in the Smartcard reader is capable of decoding multiple channels,

you can press the buttons to select whether the module should always decode only one channel (Off) or multiple channels (On).

If you select "Off", when making an unencrypted recording of an encrypted channel you cannot at the same time view an encrypted channel through the same CA module or the same Smartcard in the Smartcard reader.

If you select "On", when making an unencrypted recording of an encrypted channel you can at the same time view an encrypted channel through the same CA module or the same Smartcard in the Smartcard reader and the currently selected cable transmission channel. The number of encrypted channel that you can view at the same time depends on the CA module or Smartcard reader currently in use.

Note:

You cannot simultaneously make decoded recordings from two encrypted channels that are being decoded by different decoding systems (CA module and Smartcard reader).

Information for Conax, SECA, Viaccess and CryptoWorks users:



Note that with monthly activation intervals, the channel providers have different procedures for activating Pay TV cards. Activation may therefore be a few days before or after the beginning of a new month. During this activation period, the CA module and card must be in the slot, and the receiver must be turned on a set to the booked Pay TV channel. Follow the instructions from the Pay-TV provider.

If your Pay-TV card is then still not enabled, we recommend you briefly withdraw the CA module with the card out of the slot, with the receiver switched on, and then re-insert it.

This information has nothing to do with the properties of the unit; it is merely intended to assist you.

The selected menus, sub-menus and positions, as well as the parameters to be set, are each highlighted in colour. The menus are largely self-explanatory.



Also note the bars at the bottom of the on-screen display! These provide information on what to do next.



Select the "System Parameters" menu using the menu button when the main menu and or.



Use the buttons to select further options. If there is another sub-menu layer, press the button to open it. If there are no more sub-menus, make the settings using the or numeric pad.

Press the button to save your settings and return to the previous menu. Press the button to return directly to the TV picture.

# TV SETTINGS

Press the OK button to access the "TV Settings" menu. The following display appears:



### **AV SETTINGS**

### **VIDEO OUTPUT**

Select the type of video signal at the Scart socket here. Select the signal that your TV set can process. Refer to the operating instructions for your television set!

- FBAS Composite baseband signal (colour/picture/blanking/synchronous signal)
- RGB Red/Green/Blue signal or
- Y/C S-Video signal (luminance/chrominance)
- YUV Component signal

### **AUDIO OUTPUT**

Select the type of audio signal at the Scart socket here:

- Stereo Left and right side audio channel
- Mono left Left side audio channel only
- Mono right Right side audio channel only

If you need to select further audio settings for the specific channel (such as Dolby Digital playback) you should do this directly on the TV screen using the (vellow) button.

### TV ASPECT RATIO

Here select the TV picture format. Either

- 4:3 format,
- 16:9 or

### **DISPLAY FORMAT**

Select the screen display mode here:

- for TV type "4:3": "Pan & Scan" or "Letter-Box"
- for TV type "16:9": "Automatic" or "Always 16:9"

### SEPARATE CHANNEL VOLUME

Choose whether the volume setting is to be applied to all channels here (selection: Off), or whether you want to set the volume for each channel separately (selection: On).

### **OSD POSITION SETUP**

You can use the cursor buttons (AVA) to select and arrange the position where the menus are displayed on the TV screen. The receiver displays are then positioned on-screen as you specified.

### TV STANDARD

Here you can specify whether your TV set is a

- PAL or
- NTSC

set.

### TIME SETUP

Press the OK button to access the "Time Setup" menu. Depending on the setting ("Manual" or "Auto"), you see the following:



### TIME MODE

Select the type of time mode here:

- · Manual or
- Auto (receiver takes time from preset channel)

### TIME MODE MANUAL

### **LOCAL TIME OFFSET**

Set the variance from UMTC (Universal Mean Time Coordinate; formerly Greenwich Mean Time) here. At the bottom of the screen you see a listing of major cities to provide an indication of which time zone you have just set:



### **TIME SETTING**

Choose between "Automatic" and "Winter" time. In the example on the previous page, "Automatic" was selected.

### DAY

Select the current date here. Press the ox button to display a calendar. Select the day using the cursor buttons (A()()). If the right month and year are not displayed, you can select as follows:

- Previous month ( (red) button)
- Next month ( (green) button)
- Previous year ( (yellow) button)
- Next year ( (blue) button)

Press the OK button to confirm your selection.

### **CURRENT TIME**

Use the numeric pad to key in the current time here. The position at which the number needs to be entered is automatically underlined.

### **AUTO TIME MODE**



### **LOCAL TIME OFFSET**

See "Set Local Time" - "Manual Time Mode"

### TIME SETTING

Choose between "Automatic" and "Winter" time. In the example on the previous page, "Automatic" was selected.

### **CHANNEL TIME SETUP**

If you have selected automatic time mode, set the channel here from which you want the receiver to get the time. Press the OK button to call up a channel list from which you can select the channel you want using the AV buttons. Press the OK button to confirm your selection.

### **UPDATE TIME NOW**

Confirm with the OK button to update the time immediately.

# **COMMON INTERFACE**

See "Common Interface" section

# RECEIVER MANAGEMENT

Press the OK button to access the "Receiver Management" menu. The following display appears:



### SYSTEM INFORMATION

Press the ok button to view the current software version. Press the ok button again to close the display.

### **FACTORY SETTING**

When you press the OK button you are asked whether you want to reset all settings to their factory defaults.

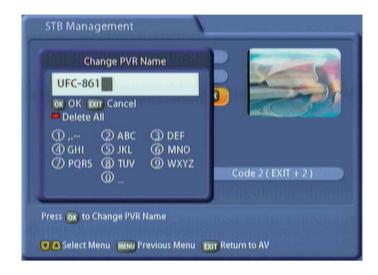
Use the OK buttons to select "OK" and start the reset by pressing the OK button.



All your personal settings will be deleted (favourites lists, channel sorting, etc.)!

### CHANGE RECEIVER NAME

Press the button and enter the unit ID here. This is useful for identification in case of theft. The alphanumeric input procedure is as described in the "Alphanumeric Inputs" section. In the example shown here the ID "UFC 861" has been assigned.



### REMOTE CONTROL CODE

Use the buttons to select one of the four existing remote control codes. Once you have selected one of the codes, the following display appears:



Confirm the displayed message with the OK button. The next time you switch on your UFC 861, it will display the following message (example): RCU 2 (Exit + 2). Now, you just have to change your remote control code to RCU 2. To do this, simultaneously press the remote control keys EXIT and 2 for a period of two seconds. The remote control code has now been switched to RCU 2.

### HARD DISK MANAGEMENT

Press the OK button to access the "HDD Management" menu. The following display appears:



### FORMAT RECORDING LIST

When you press the OK button you are asked whether you want to delete all recordings. Use the OK buttons to select "OK" and start the reset by pressing the OK button.



All the recordings on the hard disk are irrevocably deleted!

### **FORMAT MP3 ARCHIVE**

When you press the OK button you are asked whether you want to delete all MP3 files. Use the Upbuttons to select "OK" and start the reset by pressing the OK button.



All the MP3 files on the hard disk are irrevocably deleted!

### **FORMAT PHOTO ARCHIVE**

When you press the OK button you are asked whether you want to delete all photos/images. Use the OK buttons to select "OK" and start the reset by pressing the OK button.



All the photos on the hard disk are irrevocably deleted!

### **USB DEVICE SETTINGS**

If the or button is pressed, the receiver displays the principal data on the storage medium currently connected to the USB port. The following display appears (example):



Pressing the OK button opens the selection field for formatting the storage medium. The following display appears:



Your external storage medium must be formatted as "FAT 32".

If your external storage medium is not formatted as "FAT 32", you can format it here.



## **SETTING SYSTEM PARAMETERS**

Use the buttons to select the transponder frequency and type of partitioning. You have the following options:

- Option 1: Type of formatting FAT 32, complete hard disk (for Windows XP, MAC, Linux user)
- Option 2: Type of formatting EXT3, max. 100 GB partitions (for Linux and experienced Windows users)
- Option 3: Type of formatting FAT 32, three 32 GB partitions, the remainder of the storage volume formatted as for option 2 (for Windows 2000 and earlier Windows versions)



#### Formatting irrevocably deletes all data on the storage medium!

Use the **\(\bigcap\)** buttons to select "OK" and start the reset by pressing the **\(\bigcap\)** button. The following message appears:

Use the buttons to select "OK" and start the reset by pressing the button.

Press the OK button. For formatting, the receiver switches briefly into standby mode, but the display shows you the progress of the formatting operation. The receiver then automatically returns to operation.

This indicates that the formatting is complete.



## **SETTING SYSTEM PARAMETERS**

## ETHERNET SETTINGS

These settings should not be made unless the receiver is linked into a network or is linked to a PC/laptop using a crossed over network cable.

The Ethernet interface used in the receiver is a 10/100 base T Ethernet interface.



Press the or button to access the "Ethernet Settings" menu. The following display appears (example):



## **SETTING SYSTEM PARAMETERS**

If you wish to connect your receiver to a DHCP server, use the buttons to select the "On" setting. If you wish to connect your receiver to a PC or laptop, the DHCP setting must be "Off".

Note:

Refer to our network function connection examples at the end of this manual and the instructions on this subject available on the Internet under "www.kathrein.de" "Service"  $\rightarrow$  "Software and Downloading"  $\rightarrow$  "Receiver"  $\rightarrow$  "UFS 822".

## DHCP "On" (DHCP server/router)



Use the **T** buttons to select the "Get IP Address" field and confirm by pressing the

button. Your DHCP server now indicates the IP address to the receiver. As soon as the receiver has been assigned its IP address by the DHCP server (IP address is displayed), press

the **\bigcite{\sigma}** buttons to switch to the "Save" field and press the **\bigcite{\sigma}** button to confirm.



If with the "DHCP On" setting no connection can be established between the receiver and DHCP server/router, switch the setting to "DHCP Off" and perform the setting as described for (DHCP "Off").

# DHCP "Off" (Hub/Switch/Direct connection to PC or laptop)



Perform the settings for your network as required.

Use the \(\bar{\bar{\}}\) buttons to select the lines to be changed; make the changes using the numeric keypad. When you have completed all the settings, press the \(\bar{\bar{\}}\) buttons to switch back to the "Save" field and press the \(\bar{\}\) button to confirm.

#### Configuration example:

#### Receiver:

IP Address: 192.168.0.11 Subnet Mask: 255.255.255.0

#### PC/laptop:

IP Address: 192.168.0.10 Subnet Mask: 255.255.255.0



Select the "User Preference" menu using the menu button , the to buttons on the main menu and K.



Use the A buttons to select further options. If there is another sub-menu layer, press the ok button to open it. If there are no more sub-menus, make the settings using the A buttons or the numeric pad.

Press the button to save your settings and return to the previous menu. Press the button to return directly to the TV picture.

## LANGUAGE SETTINGS

See "Operating Instructions" section under "Language Selection - OSD". On this menu you can select the language for the menu, the subtitles, the audio and the programme.

## **SLEEP TIMER**

Use the buttons to select the time after which you want the UFC 861 to automatically switch off (standby). The minimum time you can set is 15 minutes, and the maximum 360 minutes. Each press

of the buttons increases or reduces the power-off time by 15 minutes. The calculated time at which the receiver will switch off is shown in the grey box underneath.



## **ACCESS CONTROL**

This menu is password-protected and can only be accessed by entering the password. The factory default password is "0000". The following display appears:



#### **LOCK RECEIVER**

Use the buttons (On/Off) to choose whether use of the receiver should be protected by a four-digit PIN. When switching the unit on from Standby you are then prompted to enter the PIN. If the PIN is not entered the receiver cannot be operated.

#### **SET AGE LIMIT**

Use the buttons to select the age limit for watching TV programmes. The minimum age rating you

can set is "under 4", and the maximum "under 18". Each press of the buttons increases or reduces the age rating by 2 years. The channels concerned can then only be viewed by entering the PIN.



This lock is only effective if the necessary locking signals are transmitted.

#### **LOCK INSTALLATION MENU**

Use the buttons (On/Off) to select whether settings/changes on the Installation menu may be made without entering the PIN code or not.

#### LOCK RECEIVER MANAGEMENT

Use the buttons (On/Off) to select whether settings/changes on the STB Management menu (a sub-menu of the System Parameters menu) may be made without entering the PIN code or not.

#### **CHANGE PIN**

Press the old PIN with a new one. Enter the new (four-digit) PIN. For security you must repeat the new PIN code once again. On the screen which then appears use the buttons to select "OK" and confirm the changed PIN by pressing the old button.



Keep your password in a safe place, so that you always have access to your channels should you ever forget it.

If you have forgotten your password, you must contact your dealer, who will be able to unlock your receiver for you.

#### **DISPLAY SETTINGS**

On this menu you can set how long the channel information and the playback information are displayed on-screen. You can also specify whether the volume bar is displayed when adjusting the volume.



## **CHANNEL INFO BANNER TIMEOUT**

Use the buttons to select the time after which you want the on-screen channel information display to be automatically cancelled. You can choose between 5, 8, 10, 12 and 15 seconds, or "Hide".

#### PLAYBACK INFO BANNER TIMEOUT

Use the buttons to select the time after which you want the on-screen playback information is automatically cancelled. You can choose between 5, 8, 10, 12 and 15 seconds, or "Hide".

#### DISPLAYING THE VOLUME BAR

Use the buttons (On/Off) to specify whether the volume bar is displayed when adjusting the volume.

#### CHANNEL INFORMATION POSITION

Use the buttons (+0 to +10) to select the vertical position of the channel information. This function allows you to move the channel information further up the screen (may be necessary if a channel information is cut off by the bottom edge of the screen because of the zoom factors of the TV set).

#### **DISPLAY BRIGHTNESS**

Use the buttons (1 to 7) to select the desired brightness for the display of the receiver.

## **DISPLAY IN STANDBY MODE (STANDBY VFD)**

Use the buttons (On/Off) to select whether the display of the receiver is switched on or off when in standby mode.

#### RADIO BACKGROUND IMAGE

Use the buttons (On/Off) to select whether the radio background image is shown in radio operation, or the screen is switched to black.

#### PVR SETTINGS

On this menu you can make settings for your recordings and for time-shifting.



#### **AUTOMATIC TIME-SHIFT**

Use the buttons to select whether automatic time-shifting is enabled or disabled. When you select "On" the receiver automatically (in the background) starts recording the programme you are viewing as soon

as you switch to the channel. Then, in manual record mode, you can press the ( ) (red) button to choose whether to record the programme from the current time or from the time you switched to the channel. The advantage of this is that you do not lose the part of the programme you were watching before you decided to record it! When you select "Off" you can only record the programme as from the point you press Record, and lose the portion of the programme before you started recording.

#### TIME-SHIFT BUFFER SIZE

Use the buttons here to select the size of the background buffer the receiver makes available for time-shift recording. You can choose between 1 and 8 GB, in 1 GB increments. The receiver indicates in brackets after the GB figure how long it will take to record it in background.

#### HARD DISK MANAGEMENT

Use the buttons to select whether hard disk management is controlled by the receiver ("Automatic") or by you ("Manual").

If you select "Automatic", the receiver automatically deletes older recordings when it reaches the maximum disk capacity, so as to make room for planned recordings (you can, however, protect recordings from being deleted by the receiver, as described in the "Recording List" section under "Edit Recordings" - "Deletion Block").

If you select "Manual" you must always ensure there is sufficient hard disk capacity yourself. If the available disk capacity falls below five percent, a warning appears the next time you restart the unit.

#### ONE-TOUCH RECORDING INFO WINDOW



Use the buttons here to select whether to enable on-screen display of the

advanced recording settings on starting (press the (red) button) or not. If you select "Disable", in manual recording mode, time-shift recording is automatically started (see "Recording" section). Other recording modes are then excluded.

#### STANDARD RECORDING TIME

Use the buttons here to select the standard recording time. If you forget to stop a recording you started manually, it is automatically stopped by the receiver when the standard recording time elapses. You can choose between 30 minutes and 4 hours, in 30 minute increments.

#### SAVE

When you have made all the settings, press the OK button to save them.

#### **EPG SETTING**



#### LEAD-IN TIME FOR RECORDING

Here use the buttons to select the number of minutes before the time set in the EPG at which the recording should start. You can choose a value between 1 minute and 10 minutes, in 1 minute increments. The recording will start that number of minutes before the due time. This allows a contingency for small variations in transmission times. Unwanted parts of the recording can later be discarded, as described in the Chapter "Recording List" under "Edit Recordings", "Cut".

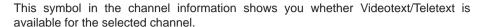
#### **RUN-ON TIME FOR RECORDING**

Here use the buttons to select the number of minutes after the time set in the EPG for which the recording should run on. You can choose a value between 1 minute and 30 minutes, in 1 minute increments. The recording will stop that number of minutes after the due time. This allows a contingency for small variations in transmission times. Unwanted parts of the recording can later be discarded, as described in the Chapter "Recording List" under "Edit Recordings", "Cut".

## DYNAMIC SI HANDLING

Use the buttons to select "On" or "Off". When the receiver is switched on, it automatically uses the program names broadcast by the transmitter. Setting this to "Off" allows you to change the program names, and prevents the receiver automatically changing those names back to the broadcast setting.

## **VIDEOTEXT (TELETEXT)**





When you press the button, the receiver processes the videotext/Teletext service data for your TV set to display, even when the signal is encrypted.

During the scan, the page which is being searched for is displayed in the top left-hand corner with the time and date displayed at the top right.



When the search is finished, the Videotext/Teletext being broadcast by the relevant program provider appears:

You have several options for calling up the desired pages:

- Input with number pad
- Scroll through using the 🔊 buttons
- Select one of the links on the current page (at the top of the screen, e.g. pages 133, 135, 116, ...) using the buttons and open by pressing the button
- Select the options shown at the bottom end by pressing the respective coloured button (blue), (green) and (green) and (red))
- Scroll up and down in the sub-pages (e.g. 1/2 and 2/2) using the buttons

Use the  $\stackrel{\textcircled{\textcircled{?}}}{\succeq}$  buttons to scroll between the pages most recently selected/called up.

Pressing the or button repeatedly allows you to display the Videotext/Teletext in three transparent stages.

Pressing the OK button a fourth time causes the Videotext/Teletext to revert to its normal form.

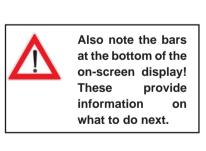
Press the button or button to exit Videotext/Teletext. When you next call up Videotext it will automatically open at the Videotext/Teletext page you last selected.

Select the "Edit Channel Lists" menu using the menu button , the the buttons on the main menu and ok.

This menu is password-protected and can only be accessed by entering the password. The factory default password is "0000".

The factory pre-programmed channel lists can be changed on this menu. You can organise and sort your preferred TV and radio channels, such as all English-language channels or those that broadcast with no commercial breaks.







Use the buttons to select further options. If there is another sub-menu layer, press the button to open it.

Press the button to save your settings and return to the previous menu. Press the button to return directly to the TV picture.

#### TV CHANNEL LIST



#### **LOCK CHANNELS**

Select the channel you want to lock using the cursor buttons ( and press the button to activate the lock. Press again to unlock the channel.

You can also sort the channels first, according to the following criteria:

- By favourites list ( (yellow) button)

Select the sort order you want to apply using the buttons and confirm with the button.

#### **RENAME CHANNELS**

Select the channel you want to rename, using the cursor buttons ( ( ), and press the OK button to open the keyboard. You can now rename the channel as you want, applying the method described in the "Alphanumeric Inputs" section.

You can also sort the channels first, according to the following criteria:



• By alphabetical or numerical sequence ( (blue) button)

Select the sort order you want to apply using the buttons and confirm with the button.

#### REARRANGE CHANNELS

Select the channel you want to move, using the cursor buttons (AVA), and press the ok button. You can now move the channel to the intended channel number using the cursor buttons, then press ok again to insert it there.

## **SKIP CHANNELS**

Go to the channel you want to skip during zapping using the cursor buttons (AVID) and press the button to select it. The channel name is displayed in grey. Press the button again to cancel the skip.

## All the channels marked "Skip" will be omitted from the EPG and the channel list!

You can also sort the channels first, according to the following criteria:

- By favourites list ( ( ( yellow) button)
- By alphabetical or numerical sequence ( (blue) button)

Select the sort order you want to apply using the buttons and confirm with the button.

#### **DELETE CHANNELS**

Select the channel you want to delete using the cursor buttons (AVA) and press the ok button to mark it as deleted. The channel name is underlined in red. Press the ok button again to cancel your channel selection for deletion (this will only work as long as you have not yet quit the menu by pressing the button).



Deleted channels can only be relocated by a channel search!

You can also sort the channels first, according to the following criteria:

- By favourites list ( (yellow) button)
- By alphabetical or numerical sequence ( ( (blue) button )

Select the sort order you want to apply using the 🔊 buttons and confirm with the Ok button.

You can also press the (red) button to select all channels at once, or cancel the global selection.

## RADIO CHANNEL LIST

Press the OK button to access the "Edit Radio Channels" menu. The following display appears:



The functions on the "Edit Radio Channels" menu are controlled in the same way as those on the "Edit TV Channels" menu.

## TV FAVOURITES LISTS

Press the OK button to access the "Edit TV Favourites" menu. The following display appears:



#### **CREATE FAVOURITES LIST**

Press the button to access the menu. You can now use the on-screen keypad (operated as described under "Alphanumeric Inputs") to name the next free Favourites list. You can set up a total of eight favourites lists (incl. radio) for your favourite TV channels.

Each family member can then save their own favourite channels and call them up at any time.

#### RENAME FAVOURITES LIST

Press the OK button to access the menu. Select the favourites list you want to rename using the

buttons and confirm the selection with the button. You can now use the on-screen keypad (operated as described under "Alphanumeric Inputs") to name or rename the Favourites list.

#### **DELETE FAVOURITES LIST**

Press the N button to access the menu. Select the favourites list you want to delete using the N buttons and confirm its deletion with the N button. Use the N buttons to select "OK" and confirm again by pressing the N button.

Only the favourites list is deleted; the channels in the favourites list are retained.

ADD/REMOVE CHANNELS (FAVOURITES LIST)

Press the button to access the menu. Use the buttons to select the favourites list to/from which you want to add or delete channels and confirm your selection with the button.

Add:

Use the vertical ver

You can also sort the channels first, by alphabetic or numeric sequence ( (blue) button).

Select the sort order you want to apply using the buttons and confirm with the button.

#### Delete:

Note:

Press the (red) button to switch to the right-hand list (listing of channels in favourites list). Use the total buttons (one channel up/down) or the buttons (sideways) to select the channel you want and press the button to delete it from the favourites list. You can remove more channels from the current selected favourites list in the same way.

## **RADIO FAVOURITES LIST**

selected Favourites list in the same way.

Press the OK button to access the "Edit Radio favourites" menu. The radio Favourites are edited in the same way as the TV Favourites.

## **TWIN FUNCTIONS**

The UFC 861 is equipped with two tuners, enabling you to perform two separate functions at the same time, including:

- Picture-in-Picture (PIP),
- Time-shift and
- One-touch recording can be performed at the same time.

## PICTURE-IN-PICTURE (PIP)

The picture-in-picture function permits simultaneous viewing of two programmes. This allows you to see when a programme you want to watch begins without having to leave the programme you are currently viewing. Due to its small size, the PIP window is only intended to be used for control purposes and is thus not suitable for viewing complete broadcasts.

When you press the (green) button the first time a window opens up in the top right-hand corner. The channel is indicated underneath the picture:



## CHANNEL SELECTION IN THE MAIN PICTURE

You can still change channel in the main picture with the channel buttons  $\stackrel{\textcircled{P}}{\vdash}$  in the usual way.

## **CHANNEL SELECTION IN THE PIP**

The channel in the PIP window can be changed using the buttons, working in the sequence shown in the currently selected channel list.

## **CHANNEL SWITCH BETWEEN MAIN PICTURE AND PIP**

The button allows switching between the two channels being received (main picture and PIP).

## **TWIN FUNCTIONS**



Press the [9] (green) button a second time to view a picture played back from the hard disk in the PIP window (see screenshot example on the next page):

- · If the programme is currently being recorded, the PIP is framed in red
- · A previously recorded PIP is framed in yellow

The picture caption is prefixed by an H (for hard disk) and the serial number.

Press the (green) button again or the (EXIT) button to exit the PIP function.

## TIME-SHIFT

The time-shift function is described in the "Time-shift" section. Note that the receiver switches to hard disk mode when executing this function.

## **ONE-TOUCH RECORDING**

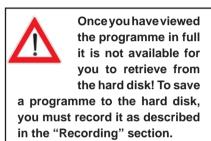
One-touch recording is described in the "Recording" section.

## **TIME-SHIFT**

#### TIME-SHIFT

If you cannot catch the beginning of a programme because you are occupied with something else, or if you have to break off watching whilst a programme is being transmitted, you can watch it in time-shift

mode. Press the button to activate this function. The receiver continues recording the programme in the background while you see a freeze-frame with an inset circular icon and the pause button (see screenshot):





"TSR" (Time-shift Recording) is shown on the receiver display in front of the channel number and name.

To start time-shifted playback, press the or would button. You can control the recorder fast forward (to the point the broadcast has currently reached), rewind (to the point at which you started recording the programme), pause and playback functions by the corresponding buttons. If you press the would button

the TV picture freezes, but the recording continues in the background. Press the button or the button again to resume viewing after a pause.

You can cancel time-shifted playback any time by pressing the button.

#### CALLING UP THE EPG

The EPG is accessed by pressing the [FF] button, and automatically displays the "Current" view (see "Current" menu item), regardless of which EPG view you had been in beforehand.

## "CURRENT" VIEW

The EPG automatically displays the "Current" (Now showing) view when first accessed, highlighting the current selected channel and the current programme.



channels Any marked "Skip" ("Edit Lists". Channel "TV Channel List", "Skip Channels") are omitted from the EPG.



In the main window you see the channel number at the left, the channel name and current programme in the centre, and a progress bar at the right. In the top right-hand corner of the picture you see the current day, date and time. The box at the right indicates the day, date and duration of the programme, the programme category (in the example above: "Documentation"), the programme's country of origin and the year it was made. The bottom section of the display contains the EPG options selectable from any EPG view. Press the

- (red) button to view the "Timer list",
- (green) to view the "Current" display,
- (yellow) to view the "Programme list" (for the selected channel),
- (blue) to view the "Highlights" (one highlight per day, up to a week ahead),
- button to view details of the selected programme, and the
- (red) to access the "Record" menu (the timer).

You can scroll line-by-line or page-by-page through the channels using the cursor buttons ((▲)(▼)(▼)(►))



or access channels directly using the numeric pad. With the buttons you can scroll back and forth 24 hours at a time (day-by-day).

Press (ok) to confirm a change of channel.

Press the button to view the upcoming programme schedules in 15-minute blocks. Press the button to return step-by-step to the start point (current time), or press the (green) button to go back directly. Quit the EPG by pressing either the button or the twice.

## **CHANNEL LIST**

Press the (yellow) button to access the schedule for the channel to which you are currently tuned in the EPG. The following display appears (example):



Press the cursor buttons ( (A) to scroll line-by-line or page-by-page through the programme list of the selected channel.

Press the buttons to switch channels and then view the new channel's programme list.

The **i** symbol next to the programme title indicates programme details are available to view (see "Details").

Press the ( ) (red) button to place your selected programme in the Record menu (see "Record").

With the  $\stackrel{\bigcirc}{\mathbb{H}}$  buttons you can scroll back and forth 24 hours at a time (day-by-day).

## PROGRAMMES SORTED BY CATEGORY

You can use the buttons to view the following programmes on the Highlights menu by category (e.g. Series, Sport, News, Magazine/Reportage, Kids ...). Within each category you can scroll line-by-line

or page-by-page as usual using the cursor buttons ( Total Press the red button to place your selected programme in the Record menu (see "Record").



## **SEARCH FUNCTION**

Pressing the button on the EPG allows you to search through all the information available to the EPG (programme name, description, title, cast, director, details) for a word or phrase you enter, with the results being displayed in a list.

Press the button to switch to "Search". You can use the numeric pad to input letters in the search form. The assignment of letters to the number pad buttons is displayed at the bottom of the screen as follows:



Use the buttons to enter a space or to delete the last letter entered. Press the button to start the search.



The results found are displayed at the left in the main display box. If the programmes found do not fit on one page, you can scroll page-by-page as well as line-by-line as usual using the cursor buttons ( ).

Press the to button to start a new search. This function is useful if you are looking for programmes about the country you are going to visit on holiday, for example.

#### **SEARCH MEMORY**



You can save individual search terms in the search memory. To do this, enter the search term, as described previously.

Press the button to load the search term into the memory. Now select the memory location using the buttons. Press the button to load the term into the memory.



There are two ways of using a search term that is stored in the memory.

- 1. You must have opened the search function. Press the very button to open the search memory.

  Use the (A)(very buttons to select the desired search term. Start the search by pressing the (OK) button.
- 2. Press the (blue) button; you can then use the buttons to select the desired search term; the programmes that match that search term are then displayed.

#### DETAILED INFORMATION

Press the i button in the EPG to call up details on the selected programme. The information is only available if the i symbol is displayed next to the programme title. The symbol only appears once you have selected the channel and programme by highlighting it with the yellow cursor bar in the various views of the EPG however.

When you press (i) the following display appears (example):



When you call up additional information in the EPG using the **i** button, you will be shown the first page of the programme's description.

Use the VA buttons to scroll up and down the various pages of detailed information. The third page displays the upcoming episodes (such as of a series; see example):





If further episodes are available (see example), you can display them by pressing the [text] "More Episodes" button. To record a following episode see "Programming a Recording".

You can use the buttons to switch to the details on the next programme in the selected view.

Press the to button to return to the previous display, such as the programme list.

#### PROGRAMMING A RECORDING

You can programme a recording from the various views of the EPG ("Current", "Programme list", "Highlights" and "Detailed information") and from within their various sub-menus. When programming recordings, the EPG automatically adapts to the actual SAT IF input signal mode (Single Mode/Loop Through/Double Tuner). Example: If you are operating the UFC 861 in loop-through mode, you cannot simultaneously record one programme on the ARD channel and one on the ProSieben channel, because the two channels are not transmitted on the same transponder.

Use the cursor buttons ( (A ( ) to select the programme you want and press the ( ) (red) button. The following display appears (example):

You can set the automatic lead-in and run-on times for your recordings in the "User Settings", "EPG Settings" menu (see also the Chapters "User Settings", "EPG Settings")



If there are no EPG data available for the channel you selected:

Select the channel for which you want to programme a recording in the "Current" view and

press the (red) button. As there is no EPG data, you must enter the data (date, start, end) manually. Enter



the data using the cursor buttons ( ) and numeric pad. Press the button to save your settings.



If a program on a protected channel is selected, you must enter the four-digit PIN code (factory setting "0000"). The PIN can be changed by the user, as described in the Chapter "Access control".

You now have a number of options to programme your recording. The settings are made using the cursor buttons ((A)) and the numeric pad:

- Recording status (once, daily, weekly, user-defined, series) selected using the <</li>
   ▶ buttons.
- Date (advanced day-by-day) selected using the buttons.
- Start time (advanced minute-by-minute) selected using the buttons or entered directly using the numeric pad.
- End time (advanced minute-by-minute) selected using the buttons or entered directly using the numeric pad
- Decoding (only for encrypted channels) Use the buttons to select if the recording is to be saved to the hard disk after having been previously decoded ("Yes") or in encrypted form ("No"). For the setting "Yes", the CI slot must be fitted with a CA module possessing a Smartcard for the channel to be decoded.

In user-defined recording you can use the buttons to move to the various days of the week and press the button to activate and deactivate them.

Press or to load and save the selected recording data.

If the timer recording you are programming overlaps with one or more recordings already programmed, you will see the following message (example):

Note: You can also change the data and settings of timer recordings you have programmed from the timer list by pressing the (OK) button! Edit data by the same method used to input them.



When recording to the hard disk the signal is not forwarded to the VCR Scart socket!

Also, when recording to a VCR or PVR, note that most digital TV signals do not contain a VPS signal.

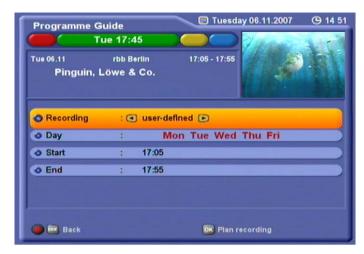
You must therefore always programme your external video or PVR to match the timer settings.



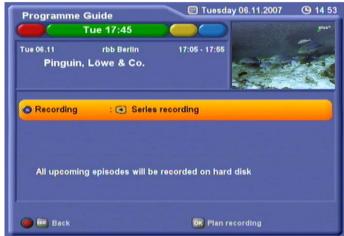
Press the or to return to the listing and edit your input accordingly. The recordings in black are the ones already stored. The one in white is the one you are currently programming which cannot be entered because of other existing recordings.

If you nevertheless want to programme the recording shown in white, you can edit or delete the preprogrammed recordings.

Example of user-defined recording:



Example of series recording:



Note:

If every episode of a series is programmed to be recorded using the "Series recording" function, the EPG locates the series in question in the updated schedules and automatically programmes recording of them. A change in the time the series is broadcast is no problem for the EPG, as its programming is based on the series title. This does, however, mean that the schedule change needs to have been notified prior to the last update of the EPG.

#### **DIRECT DECODING OF TYTY TIMERS**



If two timers are set for encrypted channels, both with decoding set to "On", and the recording times overlap, the first timer will record decoded and the second timer will record encrypted. The unit cannot make two decoded recordings at the same time (the first programme will be recorded decoded and the second programme will be recorded encrypted). If two timers are set for encrypted channels, both with decoding set to "On", and the recoding times do not overlap, both timers will record decoded. Whilst making a decoded recording, the only channels that can be viewed are other channels from that same transponder. The last decoding option selected remains in effect until changed.

#### TIMER LIST

The timer list (recording schedule) is accessed by pressing the (red) button. The timer list shows all the programmed recordings. You can use the buttons to toggle back and forth between the master timer list and the "once" and "series" displays. You can scroll line-by-line or page-by-page through the timer list using the cursor buttons (



In the box at the bottom right of the screenshot above you see the day, date and time of recording and the recording mode.

Overlaps are indicated in orange text. Use the buttons to move to the orange listing and you will see the overlapping recording shaded in white (see screenshot above).

Press or to call up a programmed timer entry and edit it.

You can delete a programmed timer recording by pressing the (red) button. If it is a (recurring) series recording, you are additionally asked whether you want to delete all the programmed recordings of this series (in the example below: "Record no further episodes at all?") or merely the specific recording selected

("No recording on this day only?"). Press the ok button, or press the ext. (red) button to cancel.



## IMPORTANT ADDITIONAL INFORMATION

- The [FG] button does not become active until 15-20 seconds after the picture appears on the TV.
- Updating of the EPG is only started if the EPG data is more than 36 hours old.
- The EPG is broadcast over the ASTRA satellite at the frequency of 12,603.75 MHz, with a symbol rate
  of 22 MSymb/s and horizontal polarisation (18 V). If you have accidentally deleted the transponder
  at this frequency, you will need to start a new satellite and transponder scan for the ASTRA satellite
  (see "Channel Search").
- Digital-compatible single-cable solutions, such as "Technisat DisiCon 4 LNB", do not permit transmission
  of the EPG data, because the necessary transponder (12,603.75 MHz, symbol rate 22 MSymb/s,
  horizontal) is not transmitted in that system. This transponder must not be deleted, as the EPG data is
  transmitted on it.

## **KEY TO SYMBOLS**

Symbol	Explanation			
16:9	Wide-screen format			
	Programme broadcast in black-and-white			
	Dolby Digital 5.1 is a sound transmission method enabling digital surround sound to be reproduced on a home cinema system			
	Dolby Surround			
2	Subtitles for the hard-of-hearing			
	Mono			
•	Stereo			
00	Two-channel sound (e.g. multiple languages available)			
*	Daily highlight			
	Detailed information			
	Recurring programme recording (series)			
	Programme scheduled for recording			

## **AUDIO SETTINGS**

## SETTING THE VOLUME



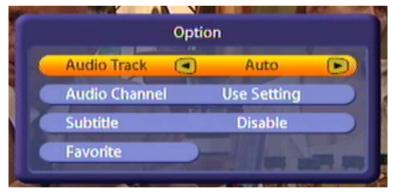
The required volume level can be set using the buttons on the remote control of the receiver. A bar indicator is displayed on the screen to show the set volume.

## **MUTING**

Press the button to mute the sound. "Mute" is displayed. Press the button again to restore the sound.

## OPTIONS MENU FOR AUDIO AND SUBTITLES

Press the (yellow) button to call up the audio menu for selecting the sound and language. This menu allows you to make settings such as audio track, audio channel and subtitle, where these are available within the received signal:



Select the menu options using the **V** buttons and make the desired setting using the **V** buttons.

Press the (yellow) button again to exit the menu.

Possible audio settings include:

- Audio Track: Auto (oriented to menu setting) or optionally the audio track transmitted by the channel (e.g. Mono audio film, Dolby Digital, Dolby Digital 2.0, Dolby Digital 5.1)

- Audio Channel: Selection from menu setting, stereo, mono left and mono right

Subtitle: Enable/disable

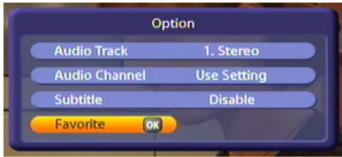
- Favourites: Press the OK button to save the previously selected sound settings with the selected channel in a favourites list. If no favourites list has been created, you will be asked whether you wish to create a new favourites list

(see example on the next page).

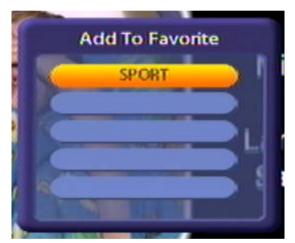
## **AUDIO SETTINGS**

#### Example:

You can for instance create a favourites list with the name "Dolby Digital" in the "Edit Channel Lists", "Edit TV Favourites" menu. By setting "Dolby Digital" in the "Favourites" function mentioned above you can also select channels that broadcast using Dolby Digital and save them in the "Dolby Digital" favourites list. When calling up one of these saved channels you no longer need add the specification "Dolby Digital sound track".



Press the OK button.



Use the buttons to select the desired favourites list. Confirm the saving of the channel with the selected sound track setting in the selected favourites list by pressing the button.

## AC<sub>3</sub>

The receiver has an optical audio output for AC3 format (Dolby Digital). This gives you the opportunity to bring cinema quality sound into your living room. The AC 3 sound is recorded and can be selected during playback. Connect the corresponding digital audio output to a Dolby Digital system.

If no AC3 signal is received, you can only make the normal stereo or mono settings, and choose the broadcast languages.



Always follow the operating instructions for your Dolby Digital system.

## **RECORD**

The UFC 861 offers you the following options for recording a programme:

#### - Time-shift

Allowing you to include the background recordings made up to that point to be included in your recording

#### Record direct to hard disk

Allowing you to start recording immediately or later

#### - Timer recording (see EPG)

Allowing you to coordinate your recordings and plan them well ahead, also providing a range of options such as the series timer



Check that there is adequate hard disk capacity available before every recording! You can see this on the right-hand side of the "Recording List" menu, indicated as "Disk Usage". It is impossible to say exactly how much storage space a recording will take up, as this depends on the volume of data content transmitted. You can work on a basis of about 1.5 GB for one hour's recording.

## RECORDING DIRECT TO HARD DISK (STORE TIME-SHIFT RECORDING)

The UFC 861 offers you a special feature in this context. As soon as you switch to a channel, the receiver automatically starts recording the programme you are viewing to the hard disk in the background. When you change channel again, the stored data is deleted and background recording begins again.

If, after viewing the programme for a time, you decide you want to record it, you can do so as from the point you switched to the channel in question.

Pre-requirement:

On the "PVR settings" menu the "Automatic Time-shift" option must be set to "On" and the "Time-shift Buffer Size" entry must allow sufficient hard disk capacity for the time-shift recording.

Also refer to the "User Settings" section on this, under "PVR settings".

#### Start

Press the (red) button. The following display appears:

## RECORD



When recording starts. only the data of the current programme is recorded. The programme running before you switched channels is not recorded.

	Record -	- 3sat	
Start Recor	d	From Event	
Duration		27 min	
ОК	OK)		
Recordin	g will be sta	orted 3 sec later	1
- 11			

Note:

The "Decoding" line is shown only when recording an encrypted channel.

You can start recording the programme as from the point you switched to the channel in question simply by pressing the OK button, or you can simply wait the 5 seconds for automatic recording to begin. If you want to alter the end time or recording duration, you can do so as described under "Duration/End" before pressing ok to start recording.

#### **Duration/End**

You can specify the duration of a recording regardless of when it starts. The receiver automatically retrieves the end time of the programme you are currently viewing from the EPG data (where available) and inserts it in the "Duration" field. Otherwise the end time is based on the default duration you set on the "User Preference" menu under "PVR Settings". If your programmed recording overlaps with another scheduled recording, the end time of the current recording is matched to the start time of the one already scheduled. To change the recording duration, use the (A) v buttons to move to the "Duration"

field and use the buttons to select the time after which you want recording to stop automatically.

Press the (yellow) button to shorten the recording by 10 minutes and the (blue) button to extend it by 10 minutes.

When you have finished making your settings, use the 🔊 buttons to select "OK" and press the OK button to start recording. If the end time still overlaps with the start time of a scheduled recording, the receiver automatically switches to the tvtv-EPG's timer list, where you can delete, cancel or edit one of the two programmed recordings listed.

You can also cancel a recording at any time by pressing the 

button.

## **RECORD**

#### Decoding

Here you can use the buttons to select whether the programme should be recorded uncoded (selection "On") or encrypted (selection "No") on the hard disk.

Selecting "On" means depending on the setting in the menu "System parameters" "Common Interface" "Multiple decoding", you may not be able to view any other encrypted channels that use to same CA module for decoding (see Chapters "System parameters" "Common Interface" "Multiple decoding").

If there is an overlap with another scheduled or ongoing recording, this fact is indicated. The receiver then presets the end time for your new recording as the start time of the overlapping programme (see "Duration/End" at the right).

## RECORDING DIRECT TO HARD DISK IMMEDIATELY/LATER

#### Start

Press the (red) button. The following display appears:



- You can record the programme immediately. To do this, use the Av buttons to reach the "Start recording" selection field and there use the Ab buttons to change the setting to "Immediate".
- You can also start recording at a later time. Use the with the 🔊 buttons to move to the "Start Record" field and use the 🖜 buttons to select the time after which you want recording to start. You can choose between 1 minute and 119 minutes, in 1 minute increments.

## **RECORD**

#### **Duration/End**

You can specify the duration of a recording regardless of when it starts. The receiver automatically retrieves the end time of the programme you are currently viewing from the EPG data (where available) and inserts it in the "Duration" field. Otherwise the end time is based on the default duration you set on the "User Preference" menu under "PVR Settings". If your programmed recording overlaps with another scheduled recording, the end time of the current recording is matched to the start time of the one

already scheduled. To change the recording duration, use the Av buttons to move to the "Duration"

field and use the buttons to select the time after which you want recording to stop automatically.

Press the (yellow) button to shorten the recording by 10 minutes and the (blue) button to extend it by 10 minutes.

When you have finished making your settings, use the 🔊 buttons to select "OK" and press the OK button to start recording. If the end time still overlaps with the start time of a scheduled recording, the receiver automatically switches to the tvtv-EPG's timer list, where you can delete, cancel or edit one of the two programmed recordings listed.

**Decoding** (see previous page)

You can also cancel a recording at any time by pressing the 

button.



If there is an overlap with another scheduled or ongoing recording, this fact is indicated. The receiver then presets the end time for your new recording as the start time of the overlapping programme (see "Duration/End" above).

### SETTING BOOKMARKS DURING THE RECORDING

During the recording you can set bookmarks, as described below under "Bookmarks". This allows you to set bookmarks at specific points of the recording, so that when you view the recording on subsequent occasions you can skip certain parts of the programme, such as the commercial breaks.



Select the "Recording List" menu using the menu button , the to buttons on the main menu and Now.

You can also call up the Recording List directly from TV screen, using the button. The following display appears (example):

You can use the button to call up a list of the available recordings, from which by pressing the buttons you can select the desired recording and call it up by pressing the button. The Recording List edit functions are not available when you use this access method. Pressing the button again causes the display to be cleared.



### FOLDER VIEW

Press the button to switch from the normal view to the folder view. Now use the buttons to select between the normal view and the folder view. Furthermore, you will be able to specify which folder your future recordings are to be saved to (in the second line). If you have already created folders (e.g. in the PVR

Manager), the following screen will appear when you press the [XIT] button (example):



## **CREATE NEW FOLDER AND SAVE TO FOLDER**

For instructions on how to create new folders and how to save recordings to different folders, see the section "Edit recordings" or consult the separate documentation available for the PVR manager.

# PLAY RECORDINGS (FOLDER VIEW)

Use the (blue) button to choose between TV and radio recordings within the recording list. Select the desired folder using the vectors. Press the vector button to open the folder and view all the recordings contained in it..

Select the desired recording with the

buttons and press on to start playback. The recorded programme will be displayed full-screen. If the folder contains several recordings, you can sort the recordings according to different criteria as described under "Play recordings (Normal view)".



# PLAY RECORDING (NORMAL VIEW)



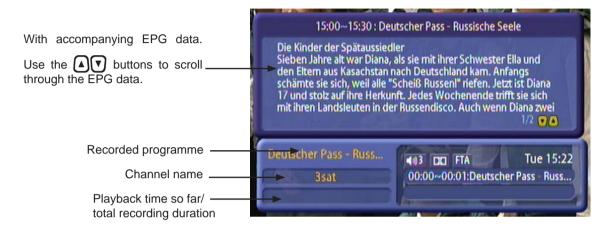
Use the (blue) button to choose between TV and radio recordings within the recording list.

By pressing the (green) button, you can sort recordings according to the following criteria:

- Date of recording (ascending)
- Duration of recording (descending)
- Duration of recording (ascending)
- Channel (descending)
- Channel (ascending)
- Name of recording (descending)
- Name of recording (ascending))
- Date of recording (descending)

Select the desired recording with the **Toleron** buttons and press or to start playback. The recorded programme will be displayed full-screen. The next time the recording list is called up, the last mode (TV/radio) and sort type will automatically be displayed.

During playback you can keep the channel information info-box permanently on-screen by pressing the i button, and press it again to view the accompanying EPG data (see example below). Press the button to cancel the on-screen displays.



## REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE

- button (play)
- Start playback
- End fast forward/rewind and resume playback
- End pause and resume playback
- Display the playback progress bar in playback mode (shows the overall duration of the recording, the current playback position and index marks that have been set)
- button (pause)
- Interrupting or pausing the playback
- Resuming playback if it had been paused using the (II) button
- button (stop)
- Playback is stopped or cancelled (reverts automatically to the recording list)
- button (information)
- Displaying channel information. Pressing it a second time brings up the associated EPG data
- button (rewind/fast forward buttons)
- Rewind/fast forward at up to 24 times normal playback speed (recordings that have yet to be decoded can
  be fast forwarded at only 4 times normal playback speed and rewound at only 2 times normal playback
  speed). During rewinding/fast forwarding you can reduce the speed by one step for every press of the
  button for the opposite direction of winding.

- After playback has been paused using the 🕕 button, you can press the 🍽 button to start slow-motion
winding. Every time the button is pressed, the slow-motion speed will be increased one step. There are 7 steps, step 7 being the slowest (slow motion is available only for forwards winding!)
buttons (left/right cursor buttons)
<ul> <li>30-second jumps forwards and backwards (can be changed using the  (yellow) button, see below)</li> <li>Pressing the button continuously achieves larger jumps (receiver performs the jump only when the button is released)</li> </ul>
buttons (up/down cursor buttons) - 10% jumps forwards and backwards
(red), (green), (blue) buttons (see "Recording List" "Bookmarks")
button (Videotext) - Calling up the recorded Videotext
button - Displaying a list of all recordings (only TV recordings)
(yellow) button (selection and changes are made using the VAID buttons)
<ul> <li>Selecting the sound track</li> <li>Selecting the audio channel (sound options: stereo, mono left, mono right, menu setting, Dolby Digital if available)</li> <li>Switch subtitles on/off (if available)</li> </ul>
- "Jump back" (jumps using the  button), setting the size of the jumps (adjustable from 30 seconds to 10 minutes in 30 second increments)

- "Jump forward" (jumps using the D button), setting the size of the jumps (adjustable from 30 seconds to 10 minutes in 30 second increments)

### **DECODING A RECORDING**

You can record encoded programmes even when the CA module with the Smartcard is not inserted. However, to view what you have recorded the CA module with Smartcard must be inserted in the Common Interface on the receiver.

You can also decode a recording after having recorded it, so as to be able to view it in future without the CA module/Smartcard combination. For this the CA module with Smartcard must be inserted in the Common Interface on the receiver.

Encoded recordings are indicated by a key sign at the end of the line (after the recording duration).

Use the ATA buttons to select the encrypted recording, and press the (yellow) button. On the

screen which the receiver then displays use the buttons to select "OK" and press the button to prepare decoding. The receiver then displays the following message: "Decoding will be started in standby".

Press (N) to acknowledge this message. As soon as you next switch the receiver to standby the recording will be decoded. The progress of decoding is indicated on the display. Wait for the decoding to complete before switching on the receiver.

The receiver saves both the decoded and the encrypted programmes on the hard disk. If you wish you can delete the encrypted programme (this is not deleted automatically by the receiver).

## **BLOCKED RECORDINGS**

To view recordings that were made from a protected channel you must enter the four-digit PIN code (factory setting "0000").

## **EDIT RECORDINGS/FOLDERS**

Before you define what type of editing you would like to perform, press the (blue) button to select whether you would like to edit a TV or radio broadcast. Recordings can be sorted as described under "Playback recordings".

Use the (red) button to access the various editing options. Switch between editing options by pressing the

(red) button. Editing functions can also be used on folders. To do this, both the folder view and the desired

folder must be selected. Press the (blue) button to perform the desired function for the selected folder:

- Delete (for recordings and folders)

Move (for recordings and folders)

Rename (for recordings and folders)

- Copy (for recordings only)

- Cut (for recordings only)

USB (for recordings only)
 Merge (for recordings only)
 Change Type (deletion block) (for recordings only)
 Lock (for recordings only)

At the bottom of the screen, you will also view the option "Create New Folder" (access with ) button).

**Note:** Recordings in progress will be displayed in red print and cannot be edited until recording has been completed. The following message will appear: "Function not possible".

To return to the recording list, press the button.



### **CREATE NEW FOLDER**

Press the button to create a new folder. The following screen appears:



Use the on-screen keypad (with the number keys on your remote control) to give the folder a name. Press to confirm your entry. A new folder is created. Press the button to cancel. To delete the last letter entered, press the button. To delete the entire entry, press the (red) button.

## **DELETING RECORDINGS/FOLDERS**

### To delete recordings:

Select the recording to be deleted with the \( \bigcap \bigcap \) buttons and confirm by pressing the \( \bigcap \bigcap \) button. The selected recording will be crossed out in red and the selection cursor will automatically jump to the next recording. Further recordings can be prepared for deleting through the same procedure. Provided you have not exited the menu with the \( \bigcap \) (red) button, you can cancel deleting by pressing the \( \bigcap \bigcap \) button. Recordings will only be permanently deleted once you have left the menu by pressing the \( \bigcap \bigcap \) (red) button.

## **MOVE (RECORDINGS TO A FOLDER)**

Use the (A) (T) buttons to select the recording to be moved and confirm by pressing the OK button. The recording will be marked with a white "+" symbol on a red background and the selection cursor will automatically jump to the next recording, enabling further recordings to be selected for transfer in the exact same way. Provided you have not exited this menu by pressing the (red) button, it is possible to unmark recordings that have been selected for transfer by pressing the (red) button. Provided you have not exited this menu by pressing the (red) button, it is possible to unmark recordings that have been selected for transfer by pressing the (red) button. You will only be asked if you really want to transfer the file when you exit the menu with the (red) button. Use the (A) and (OK) buttons to select the destination and then press the (red) button to launch the procedure. You will be asked: "Do you want to move the selected recordings? Move to:

#### RENAME

Make sure you have also selected "Rename" with the (red) button.

Use the ATA buttons to select the recording you want to rename and press the button.

The following display appears (example):



Use the buttons to select "Input Directly" and confirm this by pressing the button. You can now assign the recording any name you like as described under "Alphanumeric Inputs".

#### COPY

With this function you can copy a recording, or parts of it, to the hard disk.

Make sure you have also selected "Copy" with the (red) button.

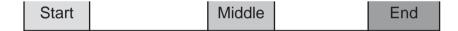
Use the AVAD buttons to select the recording you want to copy and press the button. The following display appears (example):



Also note the bars at the bottom of the on-screen display! These provide information on what to do next.



The receiver automatically starts playing back the recording. You now have several options for specifying the range to be copied (see example bar):



To set the exact times for the start and end markers of the copy range as quickly as possible you can use various buttons as aids:

- Use the buttons to rewind or fast forward at up to 24 times playback speed (you can only fast forward recordings which have not yet been decoded at 4 times playback speed and rewind them at 2 times playback speed)
- You can use the button to pause the playback and view a freeze-frame (pressing the button starts the slow motion forwards wind (7 steps obtainable by repeatedly pressing the button))
- Use the buttons to jump forward or backwards in 30-second blocks

Copy the range marked "Start" as follows:

- Move to the end of the range you want to copy and press the button. Then press the full button to set the start point marker of the range to be copied. The receiver automatically marks the full range back to the start of recording. Then press the recording range you want to copy.

Copy the range marked "Middle" as follows:

- Move to the start of the range you want to copy and press the button. Then press the (red) button to set the start point marker of the range to be copied. Then move on to the end of the copy range.

Press the button again and the (red) button to set the end marker.

Copy the range marked "End" as follows:

- Move to the start of the range you want to copy and press the ubutton. Then press the (red) button to set the start point marker of the range to be copied. Then press the (green) button to automatically mark the full range to the end of the recording

Copy the complete recording as follows:

- Press the (green) button twice to select the complete recording

Press the (red) button to copy the selected range (the selection will be darkened on-screen) or press the (red) (green) button to reset the markers.

The UFC 861 then internally duplicates the selected recording range as a new recording. When the copy operation is complete the recording list appears. The copy is indicated by a "C:" in front of the name.

### CUT

You can use this function, for example, to remove commercial breaks from your recorded programmes.

Make sure you have also selected "Cut" with the (red) button.

Use the ATA buttons to select the recording you want to cut and press the OK button. The following display appears (example):



The removed portion of a recording cannot be recovered! For security, make a backup copy of the recording before cutting it for the first time, so that if necessary you will be able to recover it (see "Copy").



Also note the bars at the bottom of the on-screen display! These provide information on what to do next.



The receiver automatically starts playing back the recording. You now have several options for specifying the range to be cut (see example bar):

	Start	Middle		End
- 1			I	

To set the exact times for the start and end markers as quickly as possible you can use various buttons as aids:

- Use the buttons to rewind or fast forward at up to 24 times playback speed (you can only fast forward recordings which have not yet decoded at 4 times playback speed and rewind them at 2 times playback speed)
- You can use the button to pause the playback and view a freeze-frame (pressing the button starts the slow motion forwards wind (7 steps obtainable by repeatedly pressing the button))
- Use the buttons to jump forward or backwards in 30-second blocks

Cut the range marked "Start" as follows:

- Move to the end of the range you want to cut and press the button. Then press the (green) button to set the start point marker of the range to be cut. The receiver automatically marks the full range back to the start of recording. Then press the (red) button to set the end marker at the end of the recording range you want to cut.

Cut the range marked "Middle" as follows:

- Move to the start of the range you want to cut and press the u button. Then press the treat (red) button to set the start marker and move forward to the end of the cut range. Press the u button again and the (red) button to set the end marker.

Cut the range marked "End" as follows:

- Move to the start of the range you want to cut and press the button. Then press the (red) button to set the start marker and press the (green) button to automatically select the full range to the end of the recording.

Press the (red) button to cut the marked range from the recording, or press the (green) button to reset the markers.



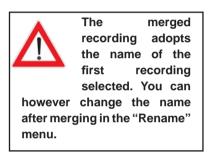
You can only remove one block from the recording in each cut operation. To remove multiple blocks you have to repeat the process.

### **MERGE**

You can use this function to merge together two or more recordings on one channel.

Make sure you have also selected "Merge" with the (red) button.

Use the **ATION** buttons to select the recordings you want to merge and also press the **DI** button. The following display appears (example):





When you have selected all the recordings you want to merge press the (red) button. The receiver shows the following display (example):



Use the buttons to select "OK" and pres the ok button to start merging the recordings. The receiver merges the two recordings. The newly created single recording is assigned the name of the first recording you selected for merging.

### **DELETION BLOCK**

You can use this function to protect recordings from being deleted when automatic hard disk management is active (see "User Preference" section under "PVR Settings", "DISK Management").

Make sure you have also selected "Deletion block" with the (red) button.

Use the \( \bigcap \bigcap \bigcap \) buttons to select the recording you want to protect and press the \( \bigcap \bigcap \) button. The recording then has a "\*" in front of its name indicating that it is protected against being deleted.

Press the ok button again to cancel the deletion block. The "\*" disappears.

### LOCK

You can use this function to lock recordings. The recording can only be played back by entering the PIN.

Make sure you have also selected "Lock" with the (red) button.

This editing function is PIN code-protected. When you select the lock function you must enter the PIN (factory setting: 0000).

Use the (A) buttons to select the recording you want to lock, and confirm by pressing

the or button. The recording then has a padlock symbol in front of its name indicating that it is locked.

Press ok again to cancel the lock. The padlock symbol disappears.



### **BOOKMARKS**

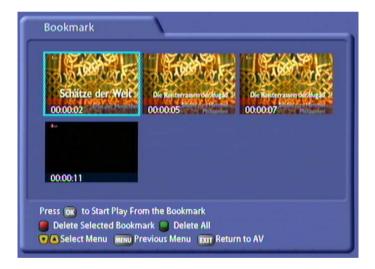
You can use this function to divide recordings into chapters, or to find specific sequences in a recording very quickly.

#### SETTING BOOKMARKS

Start a recorded programme by pressing the ok button. When the playback reaches the point at which you wish to set a bookmark, press the (red) button. A "flag" will appear at this point. You can repeat this process as often as you like.



After you have set all you bookmarks, switch to the "Chapters" menu by pressing the (blue) button:



Use the buttons to select the desired bookmark. Pressing the button starts the playback. You can press the (green) button at any time to during the playback, to skip to the next bookmark.

Note: You can set bookmarks even whilst recording. Use the buttons to select the desired point in the recording, and press the (red) button.

### **DELETING BOOKMARKS**

Use the buttons in the "Chapters" menu to select the bookmark to be deleted. Then press the (red) button. Use the buttons to select "OK" within the message that is displayed, and confirm again by pressing the key button.

To delete all bookmarks, press the (green) button in the "Chapters" menu. Use the buttons to select "OK" within the message that is displayed, and confirm again by pressing the key button.



Select the "Multimedia/Games" menu using the menu button , the the buttons on the main menu and ox). The following display appears (example):



Select the function you want, using the **v** buttons and confirm with the **v** button. The following displays appear (examples only):

### **MP3 PLAYER**



Use the buttons to select the desired directory and press the button to open the directory and access its subfolders. In the above example the first directory listed is the local hard disk of the UFC 861 (Local HDD). The second directory is a USB memory stick. You can also access an external hard disk via the USB port on the UFC 861 and open files on it without having to save them to the UFC 861. The third directory shown above is the File Sharing Folder on the hard disk of the PC/laptop.

The following display appears (example):



Also note the bars at the bottom of the on-screen display! These provide information on what to do next.



Use the A buttons to select the file to play, or select multiple files using the (blue) (multiple selection) button. Press the ok button again to open the MP3 player. The following display appears on the TV screen (example):



The MP3 player automatically starts playing the first file you selected. You now have the following options:

- Use the buttons to skip to the next/previous track
- Use the buttons to rewind or fast forward through the current selected track
- Use the (II) button to pause playback, and the (E) button to resume playback
- Use the button to cancel playback
- Use the (blue) button to access additional playback settings, and use the (blue) buttons to select them:

Repeat: On (everything is repeated); Current song; Off

Shuffle: On/Off

Close: Press the OK button to quit "Settings"

- Press the button to adjust the volume.

Press the EXIT button to return to the MP3 selection list (file system).

### **ORGANISING MP3 FILES**

You can organise the files in the "MP3 Files Operation" menu. For this, press the (yellow) button. The following display appears (example):



Select the folder or file you want by pressing the button. Your selection is marked by a "+" sign at the end. You now have the following options:

- Press the (green) button to delete the folder/file you selected
- Press the (blue) button to move the files (such as from the hard disk to an external storage device or vice versa). The receiver automatically jumps to the drive selection listings (selected using the
  - buttons). Press the (red) button to start the move operation or press the (green) button to cancel it
- Press the (red) button to create a new folder in the selected directory (for how to input the name using the on-screen keypad see "Alphanumeric Inputs")
- Press the (yellow) button to copy the selected file/folder (e.g. from the hard disk to an external storage device or vice versa). The receiver automatically jumps to the drive selection listings (selected using
  - the  $\bigcirc$  buttons). Press the  $\bigcirc$  (red) button to start the copy operation or press the  $\bigcirc$  (green) button to cancel it.

### PHOTO ALBUM



The UFC 861 can only open photos in JPEG format (file suffix: jpg/jpeg) created in RGB mode!



Use the buttons to select the desired directory and press the button to open the directory and access its subfolders. In the above example the first directory listed is the local hard disk of the UFC 861 (Local HDD). The second directory is a USB memory stick. You can also access an external hard disk via the USB port on the UFC 861 and open files on it without having to save them to the UFC 861. The third directory shown above is the File Sharing Folder on the hard disk of the PC/laptop.

The following display appears (example):



Also note the bars at the bottom of the on-screen display! These provide information on what to do next.



Use the buttons to select the file you want to view. Press the (green) button to open the preview.

Press the button to start a slide show. The following display appears on the TV screen (example):



The slide show starts automatically with the first selected photo. You now have the following options:

- Press the or button to show the slide show help bar (see screenshot above, lower part)
- Press the button to stop the slide show and then use the buttons to scroll back and forth through the individual photos. Press the button to resume the slide show
- Press the (green) button to return to the start of the slide show
- Press the (blue) button to open a PIP (Picture-in-Picture) window running the current selected channel.

  Use the (blue) buttons to switch PIP channels. Press the (blue) button again to cancel the display
- Press the (yellow) button to change the position of the PIP window on the TV screen
- Press the (red) button to open the slide show settings.

Perform the settings using the **A V S** buttons. You have the following options:

- Picture effects (picture layout): You can switch between various picture layout variants
- Duration: Here you specify how long each photo is shown for in the slide show
- Control box: Specify whether the control box (at the top right of the picture) is to be shown or hidden
- Press the button to return to the photo selection list (file system).

### ORGANISING PHOTO FILES

You can organise the files on the "JPEG Files" menu. For this, press the (yellow) button. The following display appears (example):



Select the folder or file you want by pressing the object the folder or file you want by pressing the object the folder or file you want by pressing the object the folder or file you want by pressing the object the folder or file you want by pressing the object the folder or file you want by pressing the object the folder or file you want by pressing the object the folder or file you want by pressing the object the folder or file you want by pressing the object the folder or file you want by pressing the object the folder or file you want by pressing the object the folder or file you want by pressing the object the folder or file you want by pressing the object the folder or file you want by pressing the object the folder or file you want by pressing the object the following options:

- Press the (green) button to delete the folder/file you selected
- Press the (blue) button to move the files (such as from the hard disk to an external storage device or vice versa). The receiver automatically jumps to the drive selection listings (selected using the
  - buttons). Press the (red) button to start the move operation or press the (green) button to cancel it
- Press the (red) button to create a new folder in the selected directory (for how to input the name using the on-screen keypad see "Alphanumeric Inputs")
- Press the (yellow) button to copy the selected file/folder (e.g. from the hard disk to an external storage device or vice versa). The receiver automatically jumps to the drive selection listings (selected using
  - the 🛕 🔻 buttons). Press the 🖣 (red) button to start the copy operation or press the 🖣 (green) button to cancel it.

# **GAMES**

At present there are no games available for the UFC 861.

# **APPLICATIONS**

Applications are not yet available in the current software version.

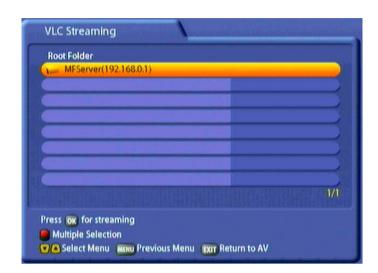
## VLC STREAMING



Streaming of VLC data can only be performed if the VLC Media Player (tested with version

0.8.6b and 0.8.6.c) is installed on your PC/laptop!

VLC Media Player can be downloaded free of charge from the following Internet page: "http://www.videolan.org"

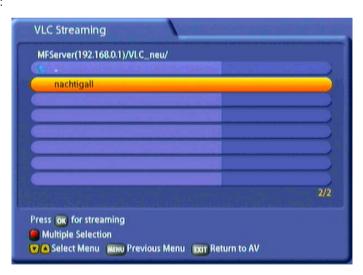


Use the buttons to select the desired directory, and press the button to open the directory and access its subfolders. In the example shown above there is only a single directory, which is the enabled folder on the hard disk of the PC/laptop.

The following display appears (example):

Use the ATA buttons to select the desired file, and press

the OK button to start playing it. The UFC 861 then uses the VLC player installed on the PC/laptop to open the file and plays the video and sound signal on the TV set. The controls (pause, play back, fast forward and rewind) can be performed using either the remote control for the receiver or using the VLC player control list displayed on the PC/laptop. Using the player.



#### Instructions for operation using the receiver remote control during playback:

The buttons allow you to make 10-second jumps

The buttons allow you to make 1-minute jumps

The 🛕 🔻 buttons allow you to make 5-minute jumps

## **EXTERNAL RECORDINGS**

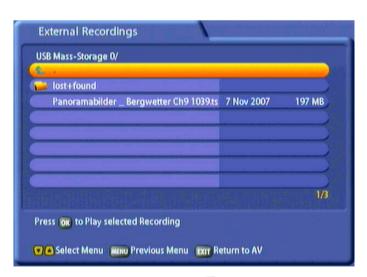


The only recordings that can be played back are those that have the format "\*.ts" and were recorded on the UFC 861.



Use the buttons to select the desired directory and press the button to open the directory and access its subfolders. In the above example you see the USB stick on the USB 2.0 host output as the first directory, and the enabled folder on the PC/laptop as the second directory.

The following display appears (example):



Use the ATAL buttons to select the desired recording, and press the OK button to start playing it. The controls (pause, play back, fast forward and rewind) are performed using the remote control for the receiver.



Select the "Installation" menu using the menu button when, the AV buttons on the main menu and OK.



Use the  $\triangle$  buttons to select further options. If there is another sub-menu layer, press the  $\bigcirc$ K button to open it. If there are no more sub-menus, make the settings using the  $\bigcirc$ A buttons or the numeric pad.

Press the or the button to save your settings and return to the previous menu or the TV picture.

## FIRST INSTALLATION:

See "First Installation" section.



Only make changes to this menu when settings or circumstances on/relating to your reception system have changed. You made the settings for the antenna during first installation. The settings should be made by a specialist engineer.

# **AUTOMATIC SEARCH**



### Select FTA and/or CI:

Use the buttons to select whether you want to search through all channels or only FTA (Free to Air) or CI (= Common Interface - encrypted channels).

#### Start Search:

When you have made your selection, use the buttons to select "Start Search" and press the button to start the search.

The following display appears:



After completion of the search, you will see the following message (example):



Pressing the OK button loads the newly found channel into the channel list. Press the EXT button to return to the TV picture.

## MANUAL SEARCH



### Start frequency:

Use the buttons to select the start frequency for the search.

## **End frequency:**

Use the buttons to select the end frequency for the search.

### **Network Search:**

Use the buttons to select the setting for the network search.

If you set the network scan to "On", the networking of the transmission channels enables additional transmission channels that have not yet been saved to be located. They are then saved and searched for new channels in the same way as the existing channels.

If you set the network scan to "Off", only the frequency you selected will be searched (see screenshot above, page 21 - page 41).

#### Select FTA and/or CI:

Use the buttons to select whether you want to search through all channels or only FTA (Free to Air) or CI (= Common Interface - encrypted channels).

#### Start Search:

When you have made your selection, use the buttons to select "Start Search" and press the button to start the search.

The on-screen displays during and after the end of the search are the same as for the "Automatic Search"

### ADVANCED CHANNEL SEARCH



### Frequency:

Use the numeric keypad to input the frequency on which the channel being searched for should be transmitted

### Symbol:

Use the numeric keypad to input the symbol rate.

#### QAM mode:

Use the buttons to select the correct type of modulation (16, 32, 64, 128 or 256 QAM).

#### **Network Search:**

Use the buttons to select the setting for the network search.

If you set the network scan to "On", the networking of the transmission channels enables additional transmission channels that have not yet been saved to be located. They are then saved and searched for new channels in the same way as the existing channels.

If you set the network search to "Off", only the frequency you selected will be searched.

#### Select FTA and/or CI:

Use the buttons to select whether you want to search through all channels or only FTA (Free to Air) or CI (= Common Interface - encrypted channels).

#### Start Search:

When you have made your selection, use the 🔊 buttons to select "Start Search" and press the 🔊 button to start the search.

The on-screen displays during and after the end of the search are the same as for the "Automatic Search".

## **UPDATE OPERATING SOFTWARE**

See "Software and Programme List Update" section

# **CONNECTING UP THE VIDEO/PVR**

For details on how to connect your external recorder to the receiver refer to the connection diagram provided at the end of this manual and the instructions for the external recorder.

## VIDEO/PVR RECORDER RECORDING

For VCR recording, the UFC 861 must be switched on or the timers must be pre-programmed and the receiver be set to the channel to be recorded. During the recording the remote control must not be operated, since all displays would be included on the recording.

### VIDEO/PVR RECORDER PLAYBACK

You must first set the Scart socket of the UFC 861 to "VCR mode" by pressing the 

button while the receiver is in operation in order for your TV set to automatically play back the picture from the external recorder.

In this setting, the picture from the external recorder is switched through to the TV set during playback.

Pressing the 0 button again restores priority to the signal from the UFC 861.

Note:

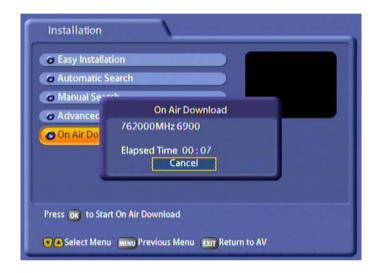
The system ensures that the same video and audio signal is present at the TV and VCR Scart sockets. The signal output format ah the TV Scart socket may however differ from that at the VCR Scart socket. The setting of the format output from the TV Scart socket can be set in the menu ("System Parameters", "TV Settings", "AV Settings" "Video output" or in the First Installation). The format "FBAS" is output as standard at the VCR Scart socket.

## SOFTWARE AND PROGRAMME LIST UPDATE

Thanks to digital technology, you can receive cable network updates of the software and channel list for your receiver (depending on the respective cable network provider). The "On Air Download" sub-menu on the "Installation" menu tells you whether new software or programme lists are available.

Press to access the main menu and use the A buttons and oK to select the "Installation" submenu.

Then move the cursor bar to the "Update operating software" menu item and select it by pressing [N]. You receiver will now search automatically for any new software and/or channel lists that are available.



The following display appears (example):



Move the highlighted cursor bar using the  $\bigcirc$  buttons. Define settings using the  $\bigcirc$  buttons.

# SOFTWARE AND PROGRAMME LIST UPDATE

## TRANSPONDER INFORMATION

Here the channel information is displayed.

## **CURRENT SOFTWARE VERSION**

The current software version is displayed here.

### DOWNLOAD INFORMATION TEXT

Use the buttons to select whether you want to download the latest information text. The information text is displayed during the software download, providing details of the new features offered by the software update.

# **CHANNEL LIST UPDATE**

Use the buttons to select whether you want to download the latest channel list.

## UPDATE OPERATING SOFTWARE

The software currently available to you is displayed here. Compare the version with the one listed under "Current Software Version". If the version available is higher than the current version on the receiver,

use the buttons to select whether you want to download the latest software.

# START DOWNLOADING

When you have made all the settings, press the or button here to start the download. The following display appears (see next page):

Note:

If you are not sure whether you want to download new software to your receiver, you can first activate the "information text" and then start the download. Only the information text is displayed. If you want the changes the new software offers, you can then still run the download as described above.

# SOFTWARE AND PROGRAMME LIST UPDATE

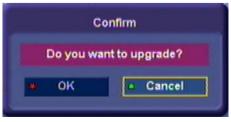


The receiver starts downloading. On the next screen you see the following:

- The number of modules being downloaded
- The elapsed time
- The current operation
- The information text, if previously selected



When the software has been successfully downloaded the receiver asks you whether you want to upgrade the operating software:



## SOFTWARE AND PROGRAMME LIST UPDATE

Use the buttons to select "OK" and launch updating by pressing the button. The following display appears: first "Er.xxx" and then "Wr xxx". Once the update has been completely transferred to the receiver, the message "Complete" is displayed.

Once the update is complete, the receiver is re-initialised and starts operation again. Never turn off the receiver during the update process, as otherwise you could lose the entire software. If this happened, the receiver would have to be re-installed at a workshop or using a PC and USB cable. On the "STB Management" - "System Information" menu you can see whether the new software has been installed.

Follow all on-screen instructions!

Check the time setting following a software update!



You can also download the updates from the Internet. The address is:

http://www.kathrein.de

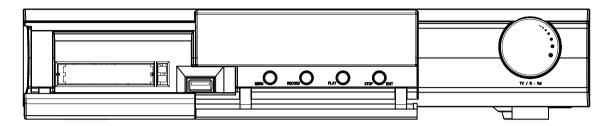
You will find the software under "Service"  $\rightarrow$  "Software and Download"  $\rightarrow$  "Receiver"  $\rightarrow$  "UFC 861"

You can install these updates by way of the PVR Manager.

## **OPERATING FROM THE FRONT PANEL**

#### **BACKUP OPERATION**

If you have misplaced your remote control, or if the batteries are flat, you can still operate your receiver from the front panel.





Because there are no numbered buttons, no password/PIN-protected functions can be displayed.

The front panel houses four buttons and the multifunction control (from now on referred to as "the control").

#### Menu button:

Press the Menu button to access the main menu. Move to the various sub-menu items by rotating the control. Select the sub-menus by pressing the middle of the control. Press the Menu button to exit the selected menu and save your changes. Press the Stop/Exit button to exit the menu.

#### Record button:

Press the Record button to start a manual recording. Select the setting by rotating the control. Press the middle of the control to make your settings. Press the Stop/Exit button to exit the menu without recording the current programme.

#### Play button:

Press the Play button to access the recording list. Select the programme you want to view by rotating the control and start playback by pressing the middle of the control. Press the Stop/Exit button to exit the menu without starting playback.

#### Stop/Exit button:

Used to cancel all ongoing actions, such as "Record" and "Play".

#### **Multifunction control:**

- Rotate the control to switch channels.
- Tap the middle of the control to call up the volume bar, then rotate the control to adjust the volume
- Press the control button twice to switch between TV and radio reception.
- Press and hold down the control button to switch the receiver to Standby mode. Tap the control button to restart the receiver.

#### TECHNICAL FEATURES

The UFC 861 twin cable receiver is fitted with two independent reception and signal processing systems, making it possible to record a broadcast and simultaneously zap through other channels. It also enables one to record two broadcasts while viewing one of them either simultaneously or time-shifted or even while viewing a programme that has been previously recorded..

- Reception of digital cable TV and radio programmes
- Two independent cable tuners with loop-through output
- 4,000 programme memory positions
- Integrated 160 GByte hard disk with over 100 hours recording capacity for TV broadcasts or 2,000 hours capacity for radio broadcasts <sup>1)</sup>
- Timeshift function
- Kathrein easy-use EPG with timer programming <sup>2)</sup>
- 16-digit alphanumeric display with status icons shows programme names and programme information
- Common Interface for one CA module 3)
- Conax decoding system embedded
- A USB 1.0 port on the front panel so that you can update the software using a USB stick
- Ethernet interface
- Multi-function controller on the device front panel
- Optical audio output for Dolby Digital data stream (AC 3)
- Cinch sockets for AV signal (composite colour picture, stereo-audio)
- Composite colour picture, RGB and Y/C signal output programmable on Scart socket
- Any number of timer recordings can be made
- 8 favourite channel lists
- Timer programming via the EPG
- Suitable for software updates (operational software and channel list separately) via USB stick and PC
- PIP function (picture-in-picture representation) on all channels
- MPEG data stream transfer to a PC or laptop via Ethernet 4)
- Load-in and replay of MP3 files
- JPEG viewer to view (slide show) and save photos
- Automatic date and time setting via DVB data stream
- Videotext decoder with 800-page memory capacity
- On-screen display (OSD) in eight languages (D, GB, F, I, NL, PL, E, TR)
- Automatic 4:3 and 16:9 picture format recognition with choice of viewing format
- Programme scan and sort function
- Suitable for UFO®compact signal processing systems
- Remote control with command set switching
- LINUX-based operational system
- Mains switch
- Delivery scope: infra-red remote control, batteries, manual, safety notes, Scart cable, power cable, loop-through cable

<sup>1)</sup> Depending on the data rate of the broadcast being transmitted

<sup>2)</sup> Display of information only if broadcast by the programme provider

<sup>3)</sup> CA modules and smartcards are not supplied

<sup>4)</sup> Software for PC can be downloaded from the Kathrein website

Туре	€	UFC 861si
Order no./ colour		20210116/Silver
RF range		
Input frequency range	MHz	2 x 47-862
Input level range	dΒμV	44-83
Demodulation	dB	QAM 16, 32, 64, 128, 256
TV system video		
Modulation, FEC, demultiplexer		DVB-C standard
Video resolution		CCIR 601 (720 x 576 lines)
Audio decoding		MPEG-1 and MPEG-2 compatible
Input data rate	MSymb/s	1.7-7
Bit rate	MBit/s	1.5-15
Frequency range	MHz	0.02-5
Output voltage	V <sub>ss</sub>	1
S/N	dB	> 53
TV system audio		
Audio decoding		MPEG-1 and MPEG-2, Layer 1 and 2
Sampling rate	kHz	32/44.1/48
Frequency range	kHz	0.04-20
Output voltage	mV <sub>ss</sub>	770
S/N	dB	> 65
Memory		
Flash-RAM/SDRAM	MB	4/32
Processor clock speed	MHz	166
Hard disk recorder		
Capacity	GByte	160
Recording time	Std.	> 100 (depending on data rate and changes of picture contents)
Power supply		
Mains voltage	V/Hz	100-240/50-60
Power consumption (operational mode/standby mode)	W	< 35/< 1
Connections		
RF input/output		2 x IEC socket/pin
Connection TV/VCR		2 x Scart socket
Audio output (analogue/optical)		2 x Cinch socket/standard optical output
Data interface		
Common Interface/ encoding system		1/Conax embedded
USB/Ethernet		1.1/1
General		
Ambient temperature range	°C	Max. +5 to +40
Dimensions (W x H x D)/ Weight	mm/kg	342 x 67 x 273/3.1

#### **ACCESSORIES**

- 1 infrared remote control (RC 660)
- 2 batteries 1.5 V, type: LR 03, size: AAA (micro)
- 1 Scart cable
- 1 operating manual

## SCART SOCKET ASSIGNMENT

Signal	Pin no.	TV	VCR/AUX
Audio right output	1	X	X
Audio right input	2		X
Audio left output	3	X	X
Audio earth	4	X	X
Blue earth	5	X	X
Audio left input	6		X
Blue signal	7	X	X
Switching voltage	8	X	X
Green earth	9	X	X
Data signal	10		
Green signal	11	X	X
Data signal	12		
Red earth	13	X	X
Data earth	14		
Red signal (C)	15	X	
Blanking signal	16	X	X
Video earth	17	X	X
Blanking signal earth	18	X	X
Video output (FBAS/Y)	19	X	X
Video input	20		X
Connector shield	21	X	X

## VHS/S-VHS SWITCHING

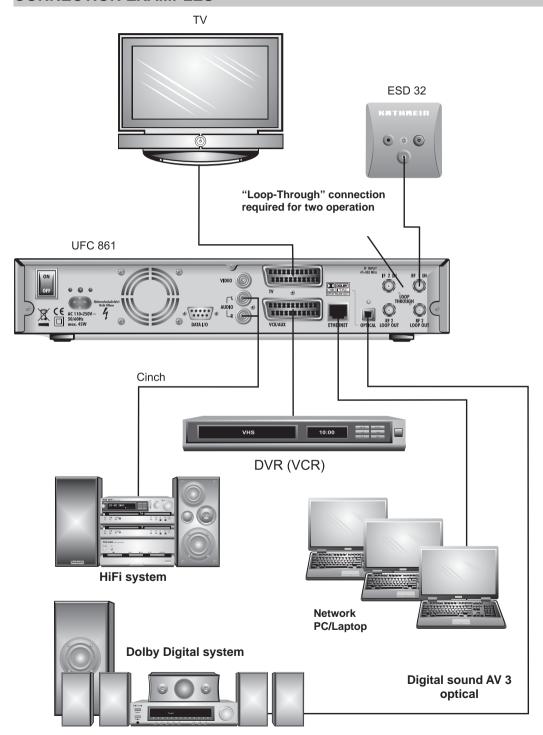
The TV Scart socket is switchable between VHS and S-VHS. The switch is made by selecting "System setup" - "TV settings" - "AV settings" from the main menu.

For VHS (RGB): The red signal is connected to terminal 15, the composite colour output to

terminal 19.

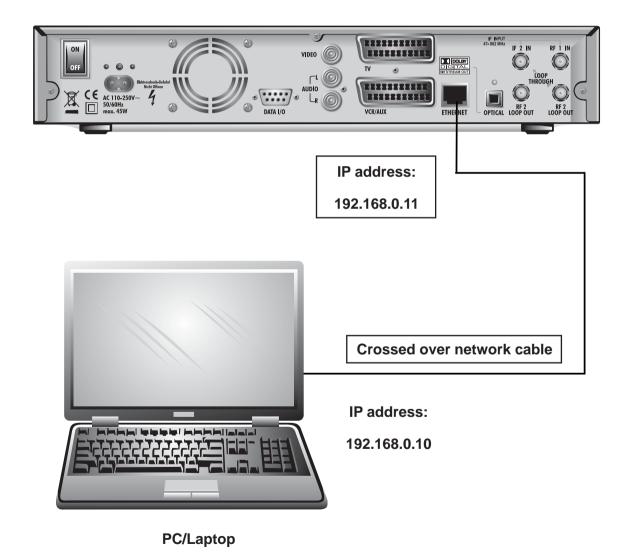
For S-VHS (C/Y): The Y output is connected to pin 19, the C output to pin 15.

## **CONNECTION EXAMPLES**

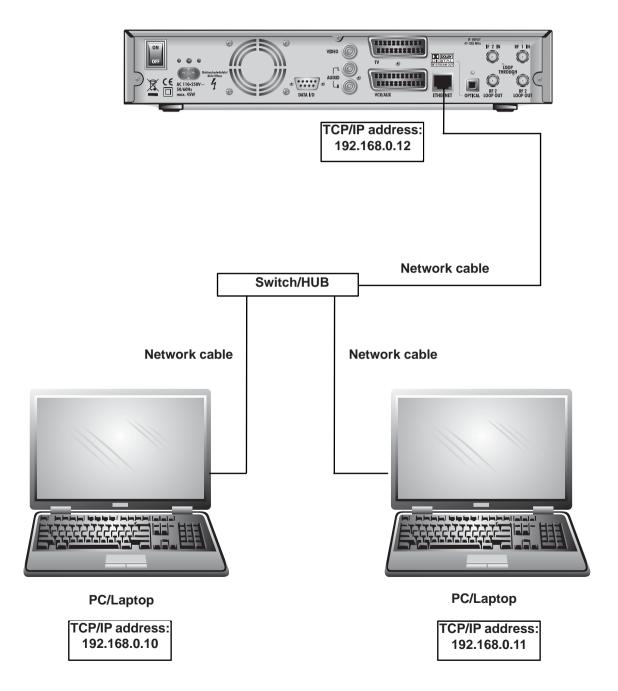


## CONNECTION EXAMPLES FOR THE NETWORK FUNCTION

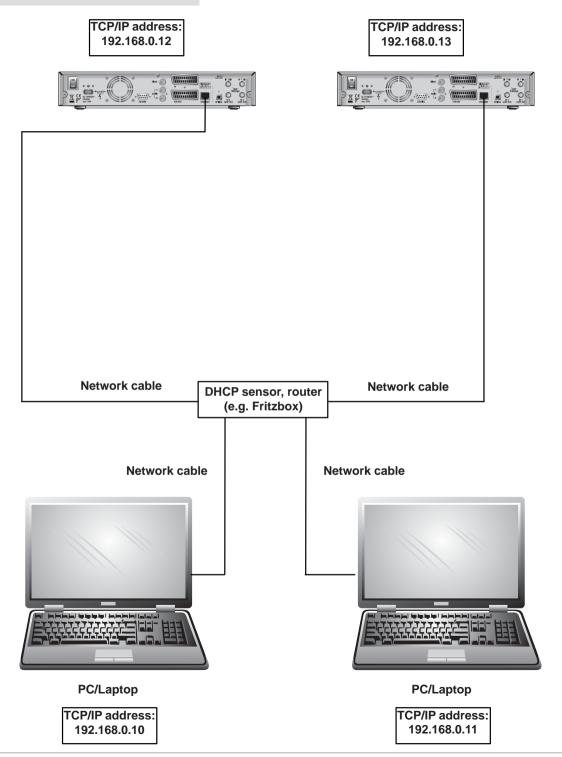
**DHCP (Receiver): OFF** 



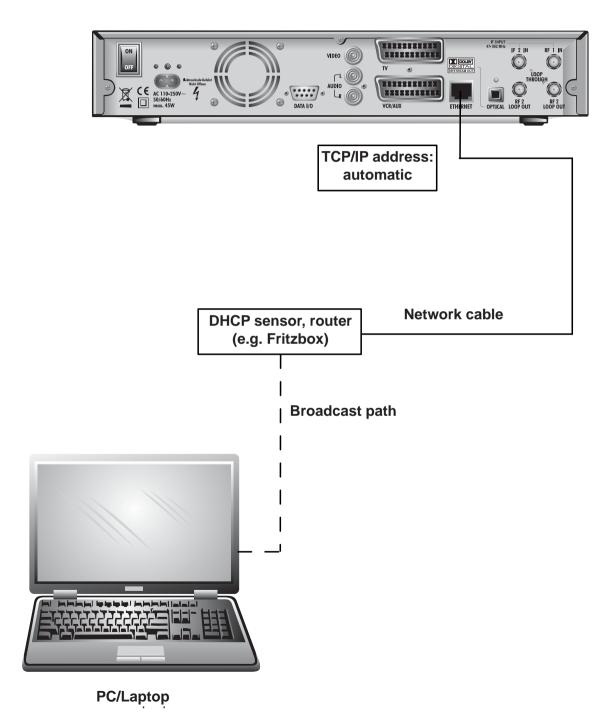
# **DHCP** (Receiver): OFF



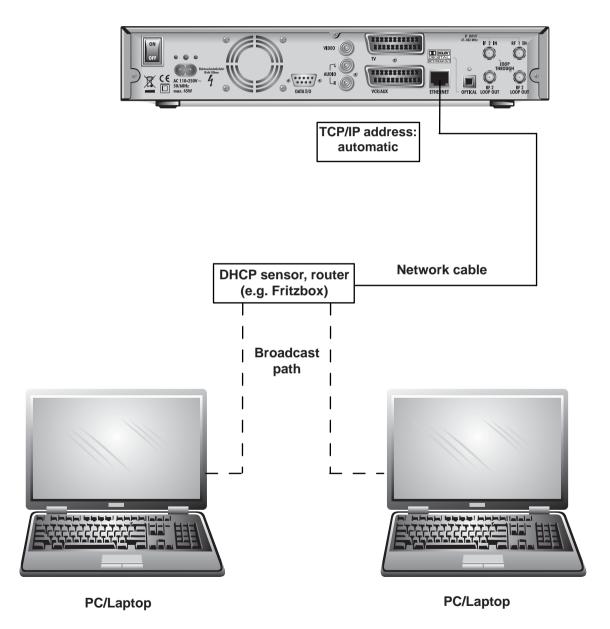
# **DHCP** (Receiver): OFF



# DHCP (Receiver): ON



# **DHCP** (Receiver): ON



# **DHCP** (Receiver): ON TCP/IP address:: TCP/IP address: automatic automatic **Network cable** DHCP sensor, router **Network cable** (e.g. Fritzbox) **Broadcast** path

PC/Laptop

**PC/Laptop** 

## SHORT TECHNICAL GUIDE

#### **DVB MPEG-2**

DVB is the abbreviation for Digital Video Broadcasting. DVB-S refers to the transmission method (C = cable). MPEG is the abbreviation for Moving Picture Experts Group, a working group that formulates internationally applicable standards for the digital compression of video and audio. MPEG-2 has established itself as the standard for compression of digital TV signals. MPEG-2 works up to a data rate of 100 MB/s.

#### **EB/NO RATIO**

The Eb/No ratio is a measure of the signal to noise ratio of a digital signal. The value is not identical to the C/N value familiar from analogue reception technology. At Eb/No values below 5 dB no reception is normally possible.

#### **OTR**

One Touch Recording

#### PID

The PID (Packet IDentification) number is an identification number for video signals and audio signals in the digital data stream of DVB-MPEG-2 signals. The receiver uses the PID number to create a unique assignment for the video and audio data transmission. The PCR PID is the identification number for the synchronization signal. The PID PCR is normally identical to the video PID. For programmes broadcast in multiple languages, the audio PD can be entered manually to assign a different language to the TV programme. After the PID is entered, the digital receiver automatically selects the audio data identified by the PID number from the data stream and assigns it to the video signal.

#### PIP

Picture-in-Picture function

#### PROGRAMME PACKAGE

The channel package for a digital transponder normally includes several TV and radio programmes. Each channel package has a fixed assignment for the transponder transmission frequency, for polarisation (horizontal or vertical), for the symbol rate and for the Viterbi rate or error rate.

#### SYMBOL RATE

The symbol rate describes the quantity of data that is transmitted per second. The symbol rate is measured in MSymbols/s and is equal to the number of symbols received per second.

#### **VIDEO BIT RATE**

The video bit rate describes the quantity of data from the digitised video signal that is transmitted per second.

# SHORT TECHNICAL GUIDE

# **GLOSSARY**

AC 3	Output for Dolby Digital signal
Audio output	Audio output on the receiver
AV programme slot	Preferred programme slot on TV set for Scart input
CA	Conditional Access (for decoding of encrypted programmes)
CI	Internationally standardised interface for CA modules
Decoder	Decoder for Pay TV
DHCP	Dynamic Host Configuration Protocol (for automatic linking of a PC/laptop into an existing network)
DVB	Digital Video Broadcasting
Eb/No [dB]	Power density per unit of information
Eb/No ratio	Digital signal to noise ratio
IP address	Internet protocol address (for identifying/addressing a computer within a network)
LED display	Display on receiver
Mute	Muting of sound
OSD	On Screen Display
PAL	Analogue TV standard
Pay TV	Television channels available on subscription (e.g. PREMIERE)
PCMCIA	Standard for internal decoder interface for pay TV
PID	See "Short technical guide"
PIN	Personal Identification Number
PIP	See "Short technical guide"
QAM	Quadrature Amplitude Modulation (QAM) is a digital modulation process which is used when transmitting within cable networks.
Receiver	Receiver
RGB	Video signal made up of three individual colour signals (red, green, blue)
Scart cable	21-pin connecting cable (e.g. receiver/TV)
Smartcard	Card from Pay-TV provider for decoding its programmes
Standby	Standby mode
S-VHS	Super Video Home System (video recorder standard)
Symbol rate	Rate of data transmission of the satellite signal
Time-shift function	Time-shifted playback
Timer function	Clock function for pre-programmed switch on and off times
VCR connection	Video recorder connection

## TROUBLESHOOTING/SERVICE

In the event of a malfunction, first check all the cable connections and operating states:

- 1. Receiver and TV set power plugs are connected to wall socket
- 2. Antenna cables on receiver input
- 3. Receiver and TV set correctly connected by a Scart or cinch cable
- 4. Audio connections are made to HiFi or Dolby Digital system as appropriate (see previous page)
- 5. Receiver and TV set (HiFi/Dolby Digital system) are switched on (check power indicators)
- 6. Receiver is responding to remote control

A selection of troubleshooting tips is offered below.

Problem	Cause	Remedy
"No signal!" warning appears on some or all channels	l	Check the cable connection between your receiver and the cable socket.  Refer to your cable network operator or an antenna specialist.
Remote control no longer responds	Receiver or remote control command set may have been unintentionally changed	Set infrared code 1, as described in operating manual under "Remote Control RC 660"; check batteries
Wrong time being displayed	The "Summer Time" setting is wrong. An incorrect time was imported from the reception signal	On "System Parameters" - "Time Settings" menu check "Summer Time enabled" and change as necessary. Switch off receiver at mains switch from current channel, e.g. ARD or ZDF, wait 10 seconds and then switch back on
Black or blue screen, no on-screen displays	Scart connection to TV deactivated by accidentally pressing the 0 button	Keep pressing the 0 button until the TV picture reappears
Network problem	Check that the, crossed network cable is correctly connected at the PC and receiver (clicked home)	Refer to your PC or network specialist

#### **SERVICE**

If, despite studying this operating manual, you still have questions about getting started with the unit or using it correctly, or if unexpected problems occur, please contact your specialist dealer. The Kathrein customer hotline is also at your disposal.

Phone: +49 900/1122240 \*

\* (0.89 EUR per minute on land lines of Deutsche Telekom AG)

AC 3	69
ACCESS CONTROL	41
CHANGE PIN	43
LOCK INSTALLATION MENU	
LOCK RECEIVER	42
LOCK RECEIVER MANAGEMENT	
SET AGE LIMIT	42
ACCESSORIES	113
ADVANCED CHANNEL SEARCH 1	-
ALPHANUMERIC INPUTS	
APPLICATIONS	
AUDIO CONNECTION	
EDIT RECORDINGS/FOLDERS	
DELETING RECORDINGS/FOLDERS	
COPY	
CUT	
DELETION BLOCK	
LOCK	
MERGE	
CREATE NEW FOLDER	_
RENAME	
MOVE (RECORDINGS TO A FOLDER)	
PLAY RECORDINGS (NORMAL VIEW)	
PLAY RECORDINGS (FOLDER VIEW)	
AUTOMATIC SEARCH	
BACKUP OPERATION 1	
BLOCKED RECORDINGS	
BOOKMARKS	
DELETING BOOKMARKS	
SETTING BOOKMARKS	
CALLING UP THE EPG	
CHANNEL INFORMATION	
RADIO CHANNEL INFORMATION	
TV CHANNEL INFORMATION	
CHANNEL LIST	
CHANNEL LIST UPDATE 1	
CHANNEL SELECTION IN THE MAIN PICTURE	
CHANNEL SELECTION IN THE PIP	
CHANNEL SWITCH BETWEEN MAIN PICTURE AND PIP	
COMMON INTERFACE	
CONNECTING THE UNIT (SAT-IF CONNECTIONS)	
RF(HF) CONNECTION	
CONNECTION EXAMPLES	
CONNECTION EXAMPLES FOR THE NETWORK FUNCTION	
"CURRENT" VIEW	
CURRENT SOFTWARE VERSION	-
DECODING A RECORDING	
DETAILED INFORMATION	61

DISPLAY SETTINGS	
CHANNEL INFO BANNER TIMEOUT	43
CHANNEL INFORMATION POSITION	44
DISPLAY BRIGHTNESS	44
DISPLAYING THE VOLUME BAR	44
DISPLAY IN STANDBY MODE (STANDBY VFD)	44
PLAYBACK INFO BANNER TIMEOUT	44
RADIO BACKGROUND IMAGE	44
DISPOSAL INSTRUCTIONS	
DOWNLOAD INFORMATION TEXT	
PVR SETTINGS	45
AUTOMATIC TIME-SHIFT	
HARD DISK MANAGEMENT	
ONE-TOUCH RECORDING INFO WINDOW	
SAVE	
STANDARD RECORDING TIME	
TIME-SHIFT BUFFER SIZE	
DYNAMIC SI HANDLING	
EPG SETTING	
LEAD-IN TIME FOR RECORDING	_
RUN-ON TIME FOR RECORDING	
ERROR MESSAGE	
ETHERNET SETTINGS	
EXTERNAL RECORDINGS	
REMOTE CONTROL RC 660	
FIRST INSTALLATION:	
GAMES	
GLOSSARY	
HARD DISK MANAGEMENT	
FORMAT MP3 ARCHIVE	
FORMAT PHOTO ARCHIVE	
FORMAT RECORDING LIST	
USB DEVICE SETTINGS	
IMPORTANT ADDITIONAL INFORMATION	
IMPORTANT INFORMATION INFORMATION ABOUT ANTENNA CONNECTION AND "LOOP THROUGH" OPERATION	
INSERTING BATTERIES IN THE REMOTE CONTROLINSERTING THE SMARTCARD AND THE CA MODULE	
INSERTING THE CA MODULE INTO THE CIINSERTING THE SMARTCARD INTO THE SMARTCARD READER (CONAX EMBEDDED)	
KEY TO SYMBOLS	
LANGUAGE SELECTION - OSD	
LANGUAGE SELECTION - OSD	
MANUAL SEARCH	
MENU CONCEPT	
MP3 PLAYER	
ORGANISING MP3 FILES	
UNGANIONIG MP3 FILEO	92

MULTIPLE DECODING	26
MUTING	68
ONE-TOUCH RECORDING	55
OPTICAL DIGITAL OUTPUT	9
OPTIONAL CHANNELS	
OPTIONS MENU FOR AUDIO AND SUBTITLES	68
FOLDER VIEW	
CREATE NEW FOLDERS AND SAVE RECORDINGS TO FOLDER	75
PHOTO ALBUM	94
ORGANISING PHOTO FILES	96
PICTURE-IN-PICTURE (PIP)	54
PRODUCT PACKAGE	_
PROGRAM INFORMATION	
PROGRAMMES SORTED BY CATEGORY	
PROGRAMMING A RECORDING	
DIRECT DECODING OF TVTV TIMERS	65
RADIO CHANNEL LIST	
RADIO FAVOURITES LIST	
RECEIVER MANAGEMENT	
CHANGE RECEIVER NAME	
FACTORY SETTING	
REMOTE CONTROL CODE	_
SYSTEM INFORMATION	
RECORDING DIRECT TO HARD DISK (STORE TIME-SHIFT RECORDING)	
RECORDING DIRECT TO HARD DISK IMMEDIATELY/LATER	72
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE	77
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE	77 113
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE	77 113 59
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE	77 113 59 60
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE	77 113 59 60 123
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE	77 113 59 60 123 73
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE	77 113 59 60 123 73 68
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE	77 113 59 60 123 73 68 41
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE	77 113 59 60 123 73 68 41 107
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE	77 113 59 60 123 73 68 41 107 20
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE  SCART SOCKET ASSIGNMENT  SEARCH FUNCTION  SEARCH MEMORY.  SETVICE  SETTING BOOKMARKS DURING THE RECORDING  SETTING THE VOLUME.  SLEEP TIMER  START DOWNLOADING  SYMBOL CODES FOR THE RECEIVER DISPLAY.  TECHNICAL FEATURES	77 113 59 60 123 73 68 41 107 20 111
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE  SCART SOCKET ASSIGNMENT  SEARCH FUNCTION  SEARCH MEMORY.  SERVICE  SETTING BOOKMARKS DURING THE RECORDING  SETTING THE VOLUME.  SLEEP TIMER  START DOWNLOADING  SYMBOL CODES FOR THE RECEIVER DISPLAY.  TECHNICAL FEATURES  TIME-SHIFT	77 113 59 60 123 73 68 41 107 20 111 55
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE  SCART SOCKET ASSIGNMENT  SEARCH FUNCTION  SEARCH MEMORY.  SETVICE  SETTING BOOKMARKS DURING THE RECORDING  SETTING THE VOLUME.  SLEEP TIMER  START DOWNLOADING  SYMBOL CODES FOR THE RECEIVER DISPLAY.  TECHNICAL FEATURES  TIME-SHIFT  TIME-SHIFT	77 113 59 60 123 73 68 41 107 20 111 55 56
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE  SCART SOCKET ASSIGNMENT  SEARCH FUNCTION  SEARCH MEMORY.  SERVICE  SETTING BOOKMARKS DURING THE RECORDING  SETTING THE VOLUME.  SLEEP TIMER  START DOWNLOADING  SYMBOL CODES FOR THE RECEIVER DISPLAY  TECHNICAL FEATURES  TIME-SHIFT  TIME-SHIFT  TIMER LIST	77 113 59 60 123 73 68 41 107 20 111 55 66
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE  SCART SOCKET ASSIGNMENT  SEARCH FUNCTION  SEARCH MEMORY.  SETVICE  SETTING BOOKMARKS DURING THE RECORDING  SETTING THE VOLUME.  SLEEP TIMER  START DOWNLOADING  SYMBOL CODES FOR THE RECEIVER DISPLAY  TECHNICAL FEATURES  TIME-SHIFT  TIME-SHIFT  TIME SETUP	77 113 59 60 123 73 68 41 107 20 111 55 66 30
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE  SCART SOCKET ASSIGNMENT  SEARCH FUNCTION  SEARCH MEMORY.  SERVICE  SETTING BOOKMARKS DURING THE RECORDING  SETTING THE VOLUME.  SLEEP TIMER  START DOWNLOADING  SYMBOL CODES FOR THE RECEIVER DISPLAY.  TECHNICAL FEATURES  TIME-SHIFT  TIME-SHIFT  TIME SETUP.  TRANSPONDER INFORMATION	77 113 59 60 123 73 68 41 107 20 111 55 56 66 30 107
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE  SCART SOCKET ASSIGNMENT  SEARCH FUNCTION  SEARCH MEMORY.  SERVICE  SETTING BOOKMARKS DURING THE RECORDING  SETTING THE VOLUME.  SLEEP TIMER  START DOWNLOADING  SYMBOL CODES FOR THE RECEIVER DISPLAY.  TECHNICAL FEATURES  TIME-SHIFT  TIME-SHIFT  TIME SETUP.  TRANSPONDER INFORMATION  TV/RADIO CHANNEL LIST	77 113 59 60 123 73 68 41 107 20 111 55 66 30 107 22
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE  SCART SOCKET ASSIGNMENT  SEARCH FUNCTION  SEARCH MEMORY  SERVICE  SETTING BOOKMARKS DURING THE RECORDING  SETTING THE VOLUME  SLEEP TIMER  START DOWNLOADING  SYMBOL CODES FOR THE RECEIVER DISPLAY  TECHNICAL FEATURES  TIME-SHIFT  TIME-SHIFT  TIME SETUP  TRANSPONDER INFORMATION  TV/RADIO CHANNEL LIST  TV AND VIDEO RECORDER CONNECTION	77 113 59 60 123 73 68 41 107 20 111 55 66 63 107 22 9
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE  SCART SOCKET ASSIGNMENT  SEARCH FUNCTION  SEARCH MEMORY.  SERVICE  SETTING BOOKMARKS DURING THE RECORDING  SETTING THE VOLUME.  SLEEP TIMER  START DOWNLOADING  SYMBOL CODES FOR THE RECEIVER DISPLAY  TECHNICAL FEATURES  TIME-SHIFT  TIME-SHIFT  TIME SETUP  TRANSPONDER INFORMATION  TV/RADIO CHANNEL LIST  TV AND VIDEO RECORDER CONNECTION.  TV CHANNEL LIST	77 113 59 60 123 73 68 41 107 20 111 55 66 30 107 22 9
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE  SCART SOCKET ASSIGNMENT  SEARCH FUNCTION  SEARCH MEMORY.  SERVICE  SETTING BOOKMARKS DURING THE RECORDING  SETTING THE VOLUME  SLEEP TIMER  START DOWNLOADING  SYMBOL CODES FOR THE RECEIVER DISPLAY  TECHNICAL FEATURES  TIME-SHIFT  TIME-SHIFT  TIMER LIST.  TIME SETUP  TRANSPONDER INFORMATION  TV/RADIO CHANNEL LIST  TV AND VIDEO RECORDER CONNECTION.  TV CHANNEL LIST  DELETE CHANNELS	77 113 59 60 123 73 68 41 107 20 111 55 66 30 107 22 9 49
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE  SCART SOCKET ASSIGNMENT  SEARCH FUNCTION  SEARCH MEMORY  SERVICE  SETTING BOOKMARKS DURING THE RECORDING  SETTING THE VOLUME  SLEEP TIMER  START DOWNLOADING  SYMBOL CODES FOR THE RECEIVER DISPLAY  TECHNICAL FEATURES  TIME-SHIFT  TIME-SHIFT  TIME SETUP  TRANSPONDER INFORMATION  TV/RADIO CHANNEL LIST  TV AND VIDEO RECORDER CONNECTION.  TV CHANNEL LIST  DELETE CHANNELS  LOCK CHANNELS	77 113 59 60 123 73 68 41 107 20 111 55 66 30 107 22 9 49 51 49
REMOTE CONTROL BUTTONS AND THEIR FUNCTIONS IN PLAYBACK MODE  SCART SOCKET ASSIGNMENT  SEARCH FUNCTION  SEARCH MEMORY.  SERVICE  SETTING BOOKMARKS DURING THE RECORDING  SETTING THE VOLUME  SLEEP TIMER  START DOWNLOADING  SYMBOL CODES FOR THE RECEIVER DISPLAY  TECHNICAL FEATURES  TIME-SHIFT  TIME-SHIFT  TIMER LIST.  TIME SETUP  TRANSPONDER INFORMATION  TV/RADIO CHANNEL LIST  TV AND VIDEO RECORDER CONNECTION.  TV CHANNEL LIST  DELETE CHANNELS	77 113 59 60 123 73 68 41 107 20 111 55 66 30 107 22 9 49 51 49 50

SKIP CHANNELS	60
TV FAVOURITES LISTS	
ADD/REMOVE CHANNELS (FAVOURITES LIST)	3
CREATE FAVOURITES LIST	
DELETE FAVOURITES LIST	52
RENAME FAVOURITES LIST	52
TV SETTINGS	28
AV SETTINGS	28
OSD POSITION SETUP	29
TV STANDARD 2	29
UPDATE OPERATING SOFTWARE	7
UPDATE OPERATING SOFTWARE	)4
VHS/S-VHS SWITCHING	3
VIDEO/PVR RECORDER PLAYBACK	)5
VIDEO/PVR RECORDER RECORDING	)5
VIEW OF FRONT PANEL (FLAP FOLDED DOWN)	7
VIEW OF REAR PANEL	
VLC STREAMING9	